

Fishery Management Report No. 17-11

**Area Management Report for the Sport Fisheries of
Northern Cook Inlet, 2013**

by

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and

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October 2017

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the *Système International d'Unités* (SI), are used without definition in the following reports by the Divisions of Sport Fish and of Commercial Fisheries: Fishery Manuscripts, Fishery Data Series Reports, Fishery Management Reports, and Special Publications. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figure or figure captions.

| | | | | | |
|---|--------------------|--|---|---|-------------------------|
| Weights and measures (metric) | | General | | Mathematics, statistics | |
| centimeter | cm | Alaska Administrative Code | AAC | <i>all standard mathematical signs, symbols and abbreviations</i> | |
| deciliter | dL | all commonly accepted abbreviations | e.g., Mr., Mrs., AM, PM, etc. | alternate hypothesis | H_A |
| gram | g | all commonly accepted professional titles | e.g., Dr., Ph.D., R.N., etc. | base of natural logarithm | e |
| hectare | ha | at | @ | catch per unit effort | CPUE |
| kilogram | kg | compass directions: | | coefficient of variation | CV |
| kilometer | km | east | E | common test statistics | (F, t, χ^2 , etc.) |
| liter | L | north | N | confidence interval | CI |
| meter | m | south | S | correlation coefficient | |
| milliliter | mL | west | W | (multiple) | R |
| millimeter | mm | copyright | © | correlation coefficient (simple) | r |
| | | corporate suffixes: | | covariance | cov |
| Weights and measures (English) | | Company | Co. | degree (angular) | $^\circ$ |
| cubic feet per second | ft ³ /s | Corporation | Corp. | degrees of freedom | df |
| foot | ft | Incorporated | Inc. | expected value | E |
| gallon | gal | Limited | Ltd. | greater than | > |
| inch | in | District of Columbia | D.C. | greater than or equal to | \geq |
| mile | mi | et alii (and others) | et al. | harvest per unit effort | HPUE |
| nautical mile | nmi | et cetera (and so forth) | etc. | less than | < |
| ounce | oz | exempli gratia | e.g. | less than or equal to | \leq |
| pound | lb | (for example) | | logarithm (natural) | ln |
| quart | qt | Federal Information Code | FIC | logarithm (base 10) | log |
| yard | yd | id est (that is) | i.e. | logarithm (specify base) | log ₂ , etc. |
| | | latitude or longitude | lat or long | minute (angular) | ' |
| Time and temperature | | monetary symbols (U.S.) | \$, ¢ | not significant | NS |
| day | d | months (tables and figures): first three letters | Jan, ..., Dec | null hypothesis | H_0 |
| degrees Celsius | °C | registered trademark | ® | percent | % |
| degrees Fahrenheit | °F | trademark | ™ | probability | P |
| degrees kelvin | K | United States (adjective) | U.S. | probability of a type I error (rejection of the null hypothesis when true) | α |
| hour | h | United States of America (noun) | USA | probability of a type II error (acceptance of the null hypothesis when false) | β |
| minute | min | U.S.C. | United States Code | second (angular) | " |
| second | s | U.S. state | use two-letter abbreviations (e.g., AK, WA) | standard deviation | SD |
| Physics and chemistry | | | | standard error | SE |
| all atomic symbols | | | | variance | |
| alternating current | AC | | | population sample | Var |
| ampere | A | | | sample | var |
| calorie | cal | | | | |
| direct current | DC | | | | |
| hertz | Hz | | | | |
| horsepower | hp | | | | |
| hydrogen ion activity (negative log of) | pH | | | | |
| parts per million | ppm | | | | |
| parts per thousand | ppt, ‰ | | | | |
| volts | V | | | | |
| watts | W | | | | |

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Alaska Department of Fish and Game
Division of Sport Fish, Research and Technical Services
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ABSTRACT

This report provides a detailed summary of the sport fisheries occurring within the Northern Cook Inlet Management Area (NCIMA) and their performance during 2013. Included are organizational, historical, and geographic descriptions of the NCIMA and its management units and programs, a historical overview of each fishery and its management, and the sport fishery performance and escapement of each fishery during 2013.

Key words: Northern Cook Inlet Management Area, Knik Arm Management Unit, Eastside Susitna Management Unit, Westside Susitna Management Unit, West Cook Inlet Management Unit, sport fisheries overview, stocked lakes, Chinook salmon, *Oncorhynchus tshawytscha*, coho salmon, *Oncorhynchus kisutch*, sockeye salmon, *Oncorhynchus nerka*, rainbow trout, *Oncorhynchus mykiss*, northern pike, *Esox lucius*, personal use fisheries, dip net fisheries, subsistence, educational fisheries, Alaska Board of Fisheries

INTRODUCTION

This report provides a detailed summary of the sport fisheries within the Northern Cook Inlet Management Area (NCIMA). Included are a description of the management area and programs related to management of area fisheries. Fisheries are described and organized by species and management unit. A historical overview and description of each fishery, historical harvest and escapement, management strategies and objectives, and sport fishery performance and escapement during 2013 are discussed.

MANAGEMENT AREA DESCRIPTION

The Northern Cook Inlet sport fish management area (NCIMA; Figure 1) includes all freshwater drainages and adjacent marine waters of Upper Cook Inlet (UCI) between the southern tip of Chisik Island and the Eklutna River, excluding the upper Susitna River drainage upstream of the Oshetna River confluence. The management area encompasses approximately 30,000 square miles and is dominated by the Susitna River drainage, which originates in glaciers of the Alaska and Talkeetna mountain ranges and flows south about 200 miles to Cook Inlet near Anchorage. Most sport fisheries in the NCIMA are easily accessible by road or jet boat, with the exception of remote West Cook Inlet (WCI) waters, which are accessible only by boat or aircraft.

The NCIMA is divided into 4 major units (Figure 1) for the purposes of management and harvest reporting:

- 1) The Knik Arm Management Unit (KAMU) includes all waters bounded on the north by Willow Creek (not including Willow Creek); on the west by a north-south line running one-half mile east of the Susitna River; on the south by Cook Inlet, Knik Arm, and the Eklutna River (not including the Eklutna River); and on the east by the upper Susitna River drainage upstream of its confluence with the Oshetna River. All adjacent marine waters of Cook Inlet are included.
- 2) The Eastside Susitna Management Unit (ESMU) includes all drainages of the upper Susitna River upstream of the confluence with the Chulitna River, to and including the Oshetna River drainage; all eastside drainages of the Chulitna River; and all eastside drainages of the Susitna River downstream of its confluence with the Chulitna River, to and including Willow Creek to the south. This management unit has no marine waters.

- 3) The Westside Susitna Management Unit (WSMU) includes all westside drainages of the Chulitna River, all westside drainages of the Susitna River downstream of its confluence with the Chulitna River, and the eastside drainages of the Susitna River within one-half mile of the Susitna River downstream of Willow Creek. This management unit has no marine waters.
- 4) West Cook Inlet Management Unit (WCIMU) includes all freshwater drainages entering Cook Inlet between (and excluding) the Susitna River and the latitude of the southern tip of Chisik Island, and all adjacent marine waters of Cook Inlet.

In terms of political geography, a major portion of this management area is very similar to the boundaries of the Matanuska–Susitna (Mat–Su) Borough, but the WCIMU extends into the Kenai Peninsula Borough. The State of Alaska is the principal land manager in the NCIMA. Other significant land managers include the Matanuska–Susitna Borough, the Kenai Peninsula Borough, various Native corporations and villages, and the federal government.

FISHERY DEVELOPMENT AND REGULATION

The waters of the NCIMA fall within 4 sport fishing regulatory areas: the Knik Arm (same as the KAMU described above for management and harvest reporting), the Susitna River (includes ESMU and WSMU), West Cook Inlet (same as WCIMU), and the Cook Inlet–Resurrection Bay Salt Water Regulatory area. Regulations governing the sport fisheries of the Knik Arm, the Susitna River, West Cook Inlet, and the Cook Inlet–Resurrection Bay Salt Water Regulatory areas are established in Chapters 60–62 and 58, respectively, of Title 5 of the Alaska Administrative Code. Regulations pertaining to other Cook Inlet fisheries, including subsistence (Chapter 01), personal use (Chapter 77), and educational permits (Chapter 93), as well as statewide provisions (Chapter 75) and commercial fisheries (Chapter 21), are also contained in Title 5 of the Alaska Administrative Code.

The process of developing fishing regulations appropriate for fisheries in the NCIMA occurs within the established Alaska Board of Fisheries (BOF) process. Public input concerning regulation changes and allocation issues is provided for in this process through various means including submission of proposals, direct testimony to the BOF, and participation in local fish and game advisory committees. Advisory committees have been established throughout Alaska to assist the BOF and the Alaska Board of Game (BOG) in assessing fisheries and wildlife issues and proposed regulations. Active committees meet several times each year. Division of Sport Fish (SF) staff and other Alaska Department of Fish and Game (ADF&G) divisions are often invited to attend the committee meetings. In this way, advisory committee meetings allow for direct public interaction with ADF&G staff involved with resource issues of local concern. Within the NCIMA there are 5 ADF&G Advisory Committees: Denali, Matanuska, Susitna, Tyonek, and Mt. Yenlo (Appendix A1). ADF&G staff also interact frequently with the Anchorage Advisory Committee, whose constituents and concerns affect the NCIMA. Under the current operating schedule, the BOF meets on a 3-year cycle. Proposals regarding finfish species within the NCIMA were addressed most recently in January, 2014. The next BOF meeting to address NCIMA issues is scheduled for 2017. Appendices B1 to B4 provide summarized histories of BOF regulatory actions for various fisheries.

MANAGEMENT PLANS

Upper Cook Inlet fisheries have been the focus of intensive allocation battles for many years. These conflicts have led the BOF to establish numerous management plans and policies to guide the area's fisheries. These plans attempt to ensure sustained yield of the area's fish resources, as well as establishing allocations, management actions, and guidelines. There are presently 14 management plans or policies that the BOF has adopted that impact NCIMA fisheries (Appendix C1).

SPORT EFFORT, HARVEST, AND CATCH

Beginning in 1977, sport fishing effort in the NCIMA has been estimated using a mail survey called the Statewide Harvest Survey (SWHS) (Mills 1979–1980, 1981a-b, 1982–1994; Howe et al. 1995, 1996, 2001 a-d; Walker et al. 2003; Jennings et al. 2004, 2006 a-b, 2007, 2009 a-b, 2010 a-b, 2011 a-b, 2015). The SWHS estimates the number of angler-days of sport fishing effort expended by anglers fishing Alaskan waters as well as the harvest and, beginning in 1990, catch (number harvested plus number released) of important sport fish species. The SWHS is designed to provide estimates of effort, harvest, and catch by site but is not designed to provide estimates of effort directed towards a single species at a site. Unless noted otherwise, all estimates of effort, harvest, and catch that follow are from the SWHS¹.

The NCIMA is composed of 2 complete SWHS reporting areas and a portion of a third (Jennings et al. 2015). These areas are as follows: 1) the Knik Arm Drainage Area reporting unit (Area K), 2) the West Cook Inlet reporting unit (Area N), and 3) the Susitna River Drainage reporting unit (Area M). Area K covers the KAMU, and Area N includes the WCIMU but also includes fresh and marine waters between the southern tip of Chisik Island and Cape Douglas, an area outside of the NCIMA. Area M includes the ESMU and WSMU but also includes several rivers and many lakes north of the Oshetna River boundary of the NCIMA. Fisheries outside of the NCIMA are not included in this report.

Effort

From 1977 through 2012, an average of 286,265 angler-days were expended by anglers fishing NCIMA waters (Table 1). Historically, the effort expended by anglers fishing NCIMA waters has represented an average of 19% of the efforts in the Southcentral Region² (Region II) and 14% of the total statewide angling effort. Angler effort peaked at 403,805 angler-days in 1992 (Figure 2). From 1995 through 1998 and again from 2009 to 2013, angler-effort fell abruptly, mirroring years when major Chinook salmon (*Oncorhynchus tshawytscha*) fisheries were either closed or severely restricted. Total effort for NCIMA averaged 218,571 angler-days from 2008 to 2012 (Table 1). The Kenai Peninsula sport fish management area is currently the only management area in Alaska that receives greater use by sport anglers (Jennings et al. 2011b).

During 2013, anglers spent an estimated 189,330 angler-days fishing NCIMA waters, which is an increase of about 30,000 angler-days above the past 2 years (Table 1). Effort in 2013

¹ The most current SWHS estimates were obtained from <http://www.sf.adfg.state.ak.us/Statewide/FishingSurvey/>; published estimates may differ.

² ADF&G, Division of Sport Fish, Southcentral Region (i.e., Region II) includes the following management areas: Anchorage, Bristol Bay, Kodiak–Aleutians, Lower Cook Inlet (Kenai), Northern Cook Inlet (Matanuska–Susitna), Prince William Sound, Seward–North Gulf Coast, and Upper Kenai Peninsula.

represented 15% and 10% of the Southcentral Region and total statewide angling effort, respectively (Table 1).

On average (1977–2012), about 40% of the total effort from the NCIMA has historically occurred in the KAMU, and during 2013, the KAMU represented 40% of the effort as well (Table 1). From 1977 to 2012, these waters supported an average of 114,908 angler-days of fishing effort. Nearly all of the effort over this period was expended in fresh water (Table 2, Figure 3). The Little Susitna River is the most heavily fished stream in the KAMU, averaging 32,814 angler-days of effort for the period 1977–2012 (Table 2, Figure 3). Effort on Jim Creek (Knik River), where a coho salmon (*O. kisutch*) fishery takes place, has grown from an average of 12,893 (1977–2012) to 18,426 angler-days (2003–2012; Table 2). A terminal Chinook salmon fishery at the Eklutna Tailrace, begun in 2002, has also contributed to increased effort in the KAMU in recent years (Table 2). Other fisheries with notable amounts of effort occur in the many stocked lakes in the Knik Arm basin (notably in Finger Lake and the Kepler Lake complex) and at various road-accessible streams including the Big Lake drainage and Nancy Lake complex (Figure 3). A limited saltwater (i.e., marine) fishery with comparatively little effort also occurs off the mouth of Fish Creek in Knik Arm (Figure 3).

Anglers fishing in the ESMU from 1977 through 2012 expended an average of 92,554 angler-days of effort (Table 1), representing an average of 32% of the total sport effort from all NCIMA waters. A total of 63,195 angler-days were spent in this area during 2013, an increase of about 10,000 angler-days over the previous 2 years (Table 3). Fisheries where more effort is expended occur in Willow Creek, Montana Creek, Sheep Creek, and the Talkeetna River (Figure 4).

Anglers fishing the WSMU from 1977 through 2012 expended an average of 66,633 angler-days (Table 1). This effort represents an average of 23% of the total effort from all NCIMA waters during this time period. A total of 37,623 angler-days was expended during 2013, a near record low (Table 4). Alexander Creek, a once major Chinook salmon fishery, has been closed to all Chinook salmon fishing as of 2008 and effort in 2013 was much lower than the 1977–2012 average (Figure 5). The Deshka River and Lake Creek each compose about 25% of the total WSMU effort. Other moderate to minor fisheries with less fishing effort occur in the Yentna River drainage, including the Talachulitna River (Figure 5). Small amounts of angler effort occur in numerous remote lakes in the area.

From 1977 through 2012, anglers fishing WCIMU waters expended an average effort of 12,170 angler-days (Table 1). This effort represents an average of 4% of the total effort from all NCIMA waters for the same period. A record total of 20,459 angler-days occurred during 2005 (Table 5), the result of increased fishing effort at Big River Lakes. WCIMU effort in 2013 of 12,400 angler-days was below the 2003–2012 average of 15,762 angler-days and below the 2008–2012 average of 13,391 angler-days. The sockeye salmon (*O. nerka*) fishery at Big River Lakes (Big River drainage, including Wolverine Creek) has developed during the last decade into one of the largest fisheries in WCIMU, with 2,931 angler-days in 2013; other major fisheries include the Kustatan, Chuitna, and Theodore rivers and south of North Foreland (Figure 6).

Harvest

From 1977 through 2012, an average of 192,269 fish were caught and kept (i.e., harvested) by anglers fishing NCIMA waters (Table 6). In 2013, 109,138 fish were harvested in NCIMA, 43% below the long term mean (Table 6), though not the lowest harvest on record (Figure 7); 34% of the harvest was from the KAMU and 30% from WSMU (Table 6). Coho salmon, rainbow trout

(*O. mykiss*), and Chinook salmon accounted for 32%, 17%, and 12% of the average harvest respectively from 1977 through 2012 (Table 7; Figure 8). In 2013, the Chinook salmon harvest of 2,940 fish was the lowest on record, the result of diminished returns to the NCIMA since 2007 and area-wide restrictions to fisheries (Table 7; Appendix D1).

On average, fish from the KAMU accounted for 42% of fish caught and kept within the NCIMA during 1977–2012 (Table 6). Coho salmon and rainbow trout dominated the harvest (Table 8). The ESMU and WSMU accounted for 27% and 24% of the average NCIMA harvest during this time period, respectively (Table 6), with coho salmon (16,824), Chinook salmon (7,885), pink salmon (*O. gorbuscha*) (7,559) dominating ESMU harvests (averages 1977–2012; Table 9), and coho salmon (13,907), Chinook salmon (11,171), smelt (6,216), and rainbow trout (4,316) dominating WSMU harvests (averages 1977–2012; Table 10). During 1997–2012, the WCIMU accounted for an average of 6% of the NCIMA harvest (Table 6), with coho salmon (7,785) and sockeye salmon (2,214) accounting for the majority of the WCIMU harvest (average 1977–2012; Table 11).

Catch-and-Release

Estimates of the number of fish caught and released by anglers fishing NCIMA waters became available for the first time during 1990 (Mills 1991). From 2001 through 2013, the average percent released was approximately 73% of the total catch (Tables 12–13).

The proportion and type of fish released by anglers varied within and among management units (Tables 14–17). On average (2001–2013), pink salmon (94.2%), chum salmon (*O. keta*) (93.4%), Arctic grayling (*Thymallus arcticus*) (92.8%), and rainbow trout (88.1%) had the greatest release percentages of angled fish species (Tables 12–13). The percentage of Chinook salmon released has increased from 63.1% to 83.8% since 2011 (Table 13), most likely a result of emergency orders issued in 2012 and 2013 to restrict ESMU fisheries to catch-and-release only. Historically, the percentage of fish released has been greatest in the ESMU (Figure 9).

SPORT FISH GUIDE LICENSING AND LOGBOOK PROGRAM

Sport fishing guide registration and licensing has developed over the years in response to a lack of information regarding the industry and its impact on fishery resources. Sport fish guide registration has been required since 1995 throughout the state. In 1998, the BOF adopted statewide registration regulations and definitions. Licenses with associated fees were not part of the registration process at that time. ADF&G has operated the Sport Fish Guide Licensing and Logbook program since 1998 to register sport fishing guides and sport fishing guide businesses. In 2004, the Alaska Legislature adopted House Bill 452 (HB 452). The Bill established licensing requirements for sport fishing guide business owners and sport fishing guides on a statewide basis. This bill was created to establish minimum professional standards that both freshwater and saltwater sport fish guides, and business owners must follow before a license can be obtained. The standards were established to protect consumers and to promote the viability and legitimacy of a professional sport fish guide industry. Businesses providing sport fish guided services were now required to obtain a State of Alaska Occupational Business License and hold liability insurance with a minimum of \$300,000 coverage for all incidents in a year (AS 16.40.260). Licensed sport fishing guides were required 1) to be citizens of the United States, Canada, or Mexico, 2) hold a current first aid card, 3) have a current year Alaska sport fishing license, and 4) have a valid U.S. Coast Guard operator's license if they were to operate a motorized vessel in navigable waters. License application forms and the information collected in logbooks on fishing

participation, effort, and harvest have remained consistent in design since 2006 (Sigurdsson and Powers 2009–2014). Logbook information is used to provide management biologists with comprehensive and credible data on guided sport fishing activities. These data can be used as an index to track effort and harvest trends, changes in effort across management areas, and to help inform the decisions of regulatory agencies such as the BOF.

In the NCIMA, guiding effort is similar between Susitna River tributaries (eastside and westside) and those of WCIMA (Table 18). However, the WCIMA has greater concentrations of guides on fewer systems than the Susitna River. Most of the guided sport fishing effort in the WCIMA is expended on Big River Lakes and the Kustatan and Chuitna rivers. From 2006–2013, clients at Big River Lakes fished an average of 3,360 days (Table 19) under the direction of about 40 guides (Figure 10). On the Susitna River drainage, most of the 2006–2013 guided effort occurred at Lake Creek, where, on average, 58 guides oversaw 3,467 client-days per year (Tables 20–21). Other areas of high guide use in the WCIMA include the Chuitna River (2006–2013 average: 15 guides) and Kustatan River (2006–2013 average: 39 guides) (Table 19). In the Susitna River drainage, the Deshka, Talachulitna, and Talkeetna rivers also sustain relatively high use by guides (Tables 20–21). In the KAMU, the Little Susitna River supported an average (2006–2013) of 16 guides (Table 22) who oversaw an average effort of about 1,500 client-days per year.

Most of the effort from 2006 to 2013 was directed at sockeye and coho salmon in the WCIMU; coho, sockeye, and Chinook salmon in the Susitna River drainage (eastside and westside); and almost exclusively at Chinook and coho salmon in the KAMU (Little Susitna River) (Table 23). The largest guided harvest for Chinook salmon occurs at Lake Creek in the WSMU, where an average of 521 Chinook salmon are harvested annually (2006–2013). Other major guided Chinook salmon fisheries occur on the Deshka (average harvest 303), Talachulitna (average harvest 203), Talkeetna (average harvest 220), and Little Susitna rivers (average harvest 239) (Figure 11). The proportion of the Chinook salmon catch that is released varies considerably between these systems (Figure 11). Between 2006 and 2013, guided anglers fishing the Talachulitna River released on average 78% of the Chinook salmon caught, but only 15% of Chinook salmon caught on the Little Susitna River were released. About 50–60% of Chinook salmon were released on average on the other major systems between 2006 and 2013. Most guided coho salmon harvest occurred at Big River Lakes and the Kustatan River of the WCIMA (Figure 12). Average coho salmon harvest (2006–2013) was 4,677 fish at Big River Lakes and 2,910 fish for the Kustatan River. Less than 25% were released at these 2 sites. The largest guided harvest of coho salmon within the Susitna and Knik Arm areas was at Lake Creek (average 1,583) and the Little Susitna River (average 894). As with Chinook salmon, catch-and-release fishing was greatest on the Talachulitna River (73%; Figure 12). The smallest percentage occurred on the Little Susitna River (13%). A listing of guides operating within the NCIMA can be found in Appendix E1.

OTHER USER GROUPS

Salmon returning to the NCIMA are harvested by various set and drift gillnet fisheries in Upper Cook Inlet (UCI) commercial salmon fishing districts (Appendix F1). In nearly all cases, harvests of NCIMA salmon in the commercial fisheries are much larger than in the sport fisheries (Figure 13). The average commercial harvest from 1983 through 2013 was approximately 4.7 million salmon by the various UCI commercial fisheries, whereas during this same period, an average of approximately 117,000 anadromous salmon were harvested annually

by sport fish anglers (Appendix F2 and calculated from Table 7). Chinook salmon are the exception; since 1988 the yearly sport harvest of Chinook salmon has exceeded the commercial harvest in all years except 1995, 2011, and 2013 (Shields and Dupuis 2013: Appendix B6; Appendix F2; Table 7).

It is generally assumed that not all commercial fisheries in Upper Cook Inlet intercept the same proportion of NCIMA salmon stocks. For purposes of management, it has generally been assumed that NCIMA salmon stocks are to a larger extent intercepted in the driftnet and Western Subdistrict setnet fisheries of the Central District and in the setnet fishery of the Northern District than in other commercial fishing districts. Catch sampling of Chinook salmon in the Northern District setnet fishery from 1998 to 2002 revealed an average combined contribution of 4% Deception and Ship creeks stocks (Whitmore and Sweet 1999; Rutz and Sweet 2000; Sweet and Rutz 2001; Sweet et al. 2003). However, it is presently unknown how this contribution relates to the overall contribution of specific NCIMA wild stocks to the Northern District setnet fishery. This question could be addressed through genetic stock identification of Chinook salmon within marine sport, commercial, and subsistence fisheries. Toward this effort, a genetic baseline is being developed that includes determining the extent of genetic separation or discrimination between stocks. A program to sample involved fisheries will commence in 2014.

The identification of discrete stocks through genetic sampling of commercially caught sockeye salmon has allowed ADF&G limited insight into the compositions of these mixed-stock fisheries by area and time. Seeb et al. (2000) estimated that Yentna and Susitna rivers sockeye salmon composed an average of 16% (range 3–35%) of the Central District drift harvests from 1995 to 1997, whereas Barclay et al. (2010a) estimated an average of 7% contribution (range 0–15%) from 2005 to 2007. In 2009, the proportion of Yentna and Susitna rivers sockeye salmon (range 1–6%) and Judd, Chelatna, and Larson lakes (JCL) (range 1–9%) sockeye salmon increased after the 22 June–2 July period. Their combined contribution in the 4 periods between 6 July and 6 August ranged between 8% and 13% (Barclay et al. 2011). It should be noted that the contributions of various stocks harvested in the drift fishery may be the result of run size, fishery restrictions and liberalizations, and run timing in a given year (Barclay et al. 2010a).

Sockeye salmon bound for the Yentna or Susitna rivers were harvested in increasing proportions in subsections of the Eastside setnet fishery farthest from the mouths of the Kenai and Kasilof rivers. Sampling in 2009 indicated Fish Creek sockeye salmon primarily migrate up the east side of the Northern District, whereas sockeye salmon bound for the Susitna River drainage migrate up the west side (Barclay et al. 2011). Genetic sampling of commercial harvests continues, as well as sampling that began in 2012 along a northern Offshore Testnet Fishery (OTF) line, crossing the inlet near the north end of Kalgin Island.

Northern Cook Inlet coho salmon stocks are harvested in Central District drift and setnet fisheries and setnet fisheries within the Northern District, although quantifiable estimates of contribution to individual commercial fisheries are unknown. Exploitation rates by commercial fisheries in Upper Cook Inlet (UCI) ranged from 10% to 15%, based on a marine tagging study (using telemetry and pit tags) in 2002 (Willette et al. 2003). Additionally, exploitation rates by UCI commercial fisheries of hatchery stocks in Anchorage and Knik Arm fisheries ranged from 6% on Ship Creek in 1993 to 93% in Wasilla Creek in 1997, and averaged 47% from 1993 to 1998 across all hatchery stocks (Bird, Campbell, Ship, and Wasilla creeks and the Little Susitna River). Development of a genetic baseline for coho salmon stocks within Cook Inlet is currently underway to gain insight into where and when northern bound stocks are harvested. Meanwhile,

genetic samples are being taken at the northern OTF line to be used in GSI analysis at a later time.

Fish stocks of NCIMA are also harvested in the Tyonek subsistence fishery, Fish Creek personal use dip net fishery, Upper Yentna River subsistence fish wheel fishery, and by various educational fisheries through permits issued to the villages of Eklutna and Tyonek, the Knik Tribal council, and the Big Lake Cultural Outreach program. The harvest by these fisheries on wild stocks is relatively small when compared to sport and commercial harvests.

ECONOMIC VALUE OF SPORT FISHING

Southwick Associates and ADF&G estimated the economic value of sport fishing across the state for 2007 (Southwick Associates Inc. et al. 2008). Expenditures in the Southcentral region were estimated to be \$988.5 million (Table 24). “Spending” is defined as money spent on goods and services, such as trips, packages, equipment, and real estate, and is assumed to be purchases of equipment and real estate exclusively used for sport fishing. Spending within Southcentral Alaska generated \$386.5 million in income and created 11,535 jobs (Table 24). Colt and Schwoerer (2009) used data from Southwick Associates et al. (2008) to estimate the economic value of sport fishing within the Mat–Su Borough. Mat–Su values for spending and generated income and jobs were based on 16.5% of the values for Southcentral Alaska³. Total spending within the Mat–Su was an estimated \$162.8 million (Table 24). Residents spent \$92.4 million, whereas nonresidents spent \$70.4 million on fishing related expenses. Estimates of spending can be considered “high-case” because expenses such as equipment and real estate are assumed to be entirely purchased for fishing (e.g., a fishing cooler or recreational cabin could be used for other purposes besides sport fishing, even if the original intent was for fishing). “Spending” generated \$28.8 million in income for residents and \$34.9 million for nonresidents of the Mat–Su, creating 852 resident and 1,048 nonresident jobs (Table 24).

RELATED PROGRAMS

The Recreational Boating and Angler Access Programs provide new access opportunities and upgrade existing angler access in order to increase fishing opportunities in NCIMA fisheries. Proposed, current, and completed access projects as well as detailed stocked lakes access summaries are provided in Appendices G1–G4.

The Information and Education Program (I&E) aims to educate the public on sport fishing opportunities and regulations, as well as biological aspects such as life histories of fish, their habitat needs, as well as ecosystem and watershed awareness. Appendix H1 summarizes the ongoing I&E programs in the NCIMA.

CHINOOK SALMON FISHERIES

Chinook salmon runs to the NCIMA are made up of many stocks and collectively make up the largest proportion of Cook Inlet drainage stocks. The Susitna River stock is the most numerous in the management area and the fourth most numerous in Alaska, smaller only than the Yukon,

³ The fraction 16.5% is derived from the fraction of angler-days expended within the Mat–Su Borough (295,981) vs. the total number of angler-days expended within Southcentral Alaska (1,796,805) for 2007.

Kuskokwim, and Nushagak river stocks (Delaney and Vincent-Lang *Unpublished*⁴). Until recently, estimates of total Chinook salmon runs to the Susitna River have not been available because estimates of escapement were not available. The collective (all Chinook salmon stocks) total annual run has long been assumed to number from 100,000 to 200,000 fish (see Delaney and Vincent-Lang *Unpublished*). Susitna River salmon studies, ongoing since 2006, have tracked distributions and estimated abundances of various salmon species; the estimated Susitna River mainstem Chinook salmon run was 89,463 in 2013 (Table 25). Yentna River drainage and WCI Chinook salmon runs were not part of the estimate. The 2013 estimate represents a low run year.

Total harvests of NCI Chinook salmon for all users varied from about 11,200 to 70,000 from 1893 to 1940 (Table 26), averaging about 38,500 fish annually. This range of harvest appeared to be sustainable, considering it was maintained for over a half century. Harvests increased from 1940 to 1951, averaging about 84,500 fish annually, and peaked at about 150,000 in 1951. After 1951, harvests declined precipitously until fisheries were closed in 1963 to allow stocks to rebuild (Figure 14). This history suggests that the maximum sustainable harvest range for NCI Chinook salmon is 38,500–70,000 across most years.

In 1976, Congress passed the Magnuson Fishery Conservation and Management Act. This act, also known as the 200-mile limit law, extended federal fishery management authority into waters from 3 to 200 miles of the United States coast. It phased out foreign fishing fleets and implemented fishery management in offshore waters. Its effects on Cook Inlet Chinook salmon stocks are not fully understood; however, it is likely that the act and its associated fishery management plans increased Chinook salmon runs to NCI.

Historically, a variety of users, including freshwater and marine sport, commercial, subsistence, personal use, and educational, have harvested NCIMA Chinook salmon runs. However, harvest strategies for NCI Chinook salmon have changed substantially since the 1890s. The fishery has slowly evolved from a mixed-stock commercial harvest to a recreationally dominated harvest that targets a multitude of discrete substocks. A detailed user history can be found in Whitmore et al. (*Unpublished*⁵).

From 1975 through 1990, sport fisheries targeting NCI Chinook salmon runs were gradually expanded to allow harvest of increasing returns (Figure 14). The *Upper Cook Inlet Salmon Management Plan* (5 AAC 21.363), adopted by the BOF in 1977, guided these expansions. This plan, as it relates to NCI Chinook salmon stocks, originally stipulated that stocks normally moving through Upper Cook Inlet to spawning grounds prior to 1 July are to be managed primarily for recreational uses. Therefore, sport fisheries were expanded and currently constitute the largest harvests (Table 27). In 1986, the BOF adopted the *Northern District King Salmon Management Plan* (5 AAC 21.366) to allocate a portion of the increasing NCI Chinook salmon runs to the commercial fishery. This step-down plan allows for a harvest of up to 12,500 Chinook salmon by a commercial setnet fishery in the Northern District during June.

Under these plans, total harvest of NCI Chinook salmon continued to increase from 1986 through 1993, ranging from about 40,300 to 54,500 fish and averaging about 46,300 fish

⁴ Delaney, K. and D. Vincent-Lang. *Unpublished*. Current status and recommendations for the future management of the Chinook salmon stocks of Northern Cook Inlet. A report to the Alaska Board of Fisheries, Anchorage, Alaska, November 1992. Alaska Department of Fish and Game, Division of Sport Fish, Anchorage. Subsequently referred to as Delaney and Vincent-Lang *Unpublished*.

⁵ Whitmore, C. D. Sweet and L. Bartlett. *Unpublished*. Area Management Report for the recreational fisheries of Northern Cook Inlet, 1992. Located at Alaska Department of Fish and Game, Division of Sport Fish, 333 Raspberry Road, Anchorage.

(calculated from Table 27). Average and peak harvest of NCIMA Chinook salmon in sport fisheries from 1986 through 1993 were about 34,600 and 49,400 fish, respectively (calculated from Table 27). Sport harvests decreased substantially to about 16,500 fish in 1995, due in part to fishery closures and restrictions (Appendix B1) placed on sport fisheries following a period of poor escapements observed in the early 1990s. As Chinook salmon stocks rebounded in the mid to late 1990s, fisheries were reopened and some restrictions were lifted. Beginning in 1997, sport harvests trended upward, peaking at about 33,100 fish in 2000. From 2002 through 2006, harvests did not vary by much, with an average of 27,913 and range of 26,474–28,682 fish harvested. The average total harvest of NCI Chinook salmon by all users was about 32,000 fish during the same time period (calculated from Table 27).

In response to development of a harvest dominated by a sport fishery that targeted a multitude of discrete substocks, biological escapement goals (BEGs) were established in 1993 for 18 NCIMA Chinook salmon spawning streams based on long-term escapement survey data. Escapement goals are intended to ensure the long-term viability of NCIMA Chinook salmon stocks. The 1993 BEGs were replaced with sustainable escapement goals (SEGs) as new assessment methods were developed (Bue and Hasbrouck *Unpublished*). Escapement goals were revised during the February 2002 BOF meeting, and again at the 2005 BOF meeting (Hasbrouck and Edmundson 2007). Based on the *Policy for the Management of Sustainable Salmon Fisheries* and the *Policy for Statewide Salmon Escapement Goals*, both were adopted by the BOF during winter 2000–2001. Currently there are 17 SEGs for Chinook salmon in the NCIMA (Table 28).

The primary management objective for NCIMA Chinook salmon is to achieve established escapement goals. Spawning escapement on each of the 17 monitored streams is indexed annually using helicopter surveys or weirs. To provide consistent annual index counts, spawning streams are flown in their entirety from mouth to headwaters (with the exception of the Little Susitna River) to avoid shifts in spawning distribution and in case the survey is not flown during peak spawning. On the Little Susitna River, approximately 40 miles of the lower river is not part of the index count and contains relatively little spawning habitat. Aerial and weir counts paired on the Little Susitna and Deshka rivers during the late 1980s and mid-1990s indicated 40–60% (average 46%) of the actual escapement was counted from the air (Lafferty 1997). Aerial and weir counts compared on the Deshka River for 1995–1997, 1999, 2002, and 2004 showed an average of 45% of the actual escapement counted in the aerial survey (Ivey 2014). A significant linear regression describes the relationship, which has been used to estimate escapement from aerial indices on years of incomplete weir counts and for years prior to the weir program (Ivey 2014). Aerial counts between 2 surveyors, each counting the same stream, were also paired in 1993–1996 on several streams of NCI. Paired aerial counts revealed an average of 93% agreement between surveyors, ranging from 91% to 98% agreement (Lafferty 1997). This effort was repeated in 2012 with 3 surveyors each flying 6 streams of the ESMU; percent agreement was similarly high between surveyors (Sam Ivey, Fishery Biologist, ADF&G, Palmer, personal communication).

To ensure escapement goals are met, fishery managers may reduce harvest potential by reducing daily and seasonal bag limits, prohibiting bait, and reducing time and areas open to fishing. Streams that consistently fall below escapement goals may be closed to Chinook salmon fishing. On streams with weirs or programs that provide inseason sport harvest information, regulations may be liberalized by emergency order (EO) if harvestable surpluses are projected.

From the late 1970s through 1989, all NCIMA escapement goals were achieved. However, beginning in 1990, observed spawning escapements in streams with escapement goals decreased, and in 1992–1995 escapements were well below escapement goals in many streams. In response, actions were taken to reduce harvest levels in 1994 through EOs and BOF regulations. As a result, the combined sport harvest of NCI Chinook salmon from 1995 through 1998 was reduced to approximately half of the 1993 peak harvest (Table 27). Escapement goals were again achieved beginning in 1997 when runs to the area rebounded. Fisheries were subsequently reopened, which contributed in part to increased harvest levels beginning in 1999.

After 1999, escapement goals were mostly met through 2006, and sport harvest levels remained between 26,000 and 33,000 through the mid-2000s despite liberalizations to major fisheries. Harvest since 2006 has trended downward and has become variable in fisheries with recent restrictions that were imposed to address periods of low Chinook salmon production and below average runs. Of the 17 Chinook salmon goals in NCI, performance has declined from achieving over 90% prior to 2007 (2002–2006) to about 40% (2007–2010), despite various EOs restricting major sport fisheries. In 2011, the BOF made stock of concern (SOC) designations on 6 systems located in the WCI and Susitna River areas. Chuitna, Theodore, and Lewis rivers and Alexander Creek were designated as stocks of management concern, and Willow and Goose creeks were designated as stocks of yield concern. The BOF closed the Chuitna, Theodore, and Lewis rivers and Goose Creek, and reduced fishing time within Unit 2 of the ESMU in an effort to reduce harvest by 50% in that unit (Appendix B1). Only 24% of the NCIMA escapement goals were achieved in 2011, even with these changes in place, and further restrictions to sport and commercial fisheries were necessary to adequately address the areawide downturn. Prior to the 2012 season, a strategy was developed and then implemented by EO that targeted a 50% reduction in the Susitna and Little Susitna rivers harvest from previous low run years (2009–2011) through various restrictions to annual limit, gear, and time (Appendix D1). Commercial fisheries targeting Chinook salmon in the Northern District were restricted from 12- to 6-hour periods in order to achieve escapement goals while providing a full season of fishing opportunity. The 2012 run was lower than anticipated, and the Susitna and Little Susitna river drainages were ultimately closed prior to the end of the regulatory season. Only 24% of the NCIMA escapement goals were achieved in 2012. The strategy was refined to target a 75% reduction in harvest from previous low run years (2009–2011) in 2013, which resulted in the achievement of 69% of the NCIMA escapement goals, the highest proportion met since 2006. These strategies are detailed in the following report sections. Within the sport fishery, the 2013 restrictions resulted in about a 70% harvest reduction from the low run years (2009–2011) and about a 90% harvest reduction from high run years (1999–2006) (Table 27). The downward trend in run size since 2007 is likely due to poor marine survival. The regulatory history of Chinook salmon in Northern Cook Inlet waters is presented in Appendix B1.

KNIK ARM MANAGEMENT UNIT CHINOOK SALMON FISHERIES

Fishery Description

Within the KAMU (Figures 1 and 15), the Little Susitna River is the only stream open to Chinook salmon harvest other than the Eklutna tailrace terminal fishery (see section below). The Little Susitna River supports a major Chinook salmon fishery as well as the largest coho salmon fishery in the NCIMA. Chinook salmon bound for the Little Susitna River are also harvested in marine sport and commercial fisheries, and subsistence and personal use fisheries.

Chinook salmon return to the Little Susitna River from late May through early July; the run peaks around mid-June. Spawning occurs from the Burma Road area upstream into Hatcher Pass, with the majority of spawning taking place upstream of the Parks Highway Bridge. There are few Chinook salmon that use tributaries for spawning. Peak spawning typically occurs during the last week of July.

Angler access to the Little Susitna River occurs at 3 primary locations: 1) intertidal waters of the river, which are accessed by boats crossing Knik Arm from the Port of Anchorage public boat launch; 2) the road-accessible Little Susitna Public Use Facility (Burma Road Access), which includes a launch and campground; and 3) private and public launches near the Parks Highway, which provide access to the upper reaches of the river. The Little Susitna Public Use Facility is the most heavily used access to the river. Powerboats can travel on the Little Susitna River from its mouth to the Parks Highway during periods of moderate to high water levels. However, during low flows, travel is restricted to smaller jet boats between river mile (RM) 28 and the Parks Highway at RM 70.

Historical Harvest and Escapement

Information about the fishery and Chinook salmon stock is available from several sources. Inseason sport harvest and fishing effort for Chinook salmon were estimated by onsite creel surveys from 1979 through 1990. Creel survey and SWHS estimates produced comparable results; therefore, the creel survey program was discontinued in 1991. Average annual harvest of Chinook salmon from the Little Susitna River was 2,070 fish from 1977 through 2012 (Figure 16, Table 29). However, harvest has trended downward, averaging 1,161 from 2007 to 2012, due to diminished returns and restrictions placed on the fishery.

Due to the semiglacial character of the Little Susitna River, the waters were too turbid to do aerial survey counts of Chinook salmon on spawning grounds in 1986, 1989, 1993, 1997, and 1999; surveys have been completed in 25 years from 1983 to 2012. The average Chinook salmon escapement index count through 2012 was 1,315 fish, ranging from 3,197 fish counted in 1988 to 558 fish counted in 1984 and 589 fish counted in 2010 (Figure 17, Table 30). The SEG of 900–1,800 fish (starting in 2002) was missed in 2010 and 2011 despite restrictions to the sport fishery. During 1988, 1989, 1994, and 1995, a weir was operated at RM 32.5, with escapement counts ranging from about 2,800 to 7,400 fish (Table 30). Aerial counts in 1988, 1994, and 1995 were 43%, 41%, and 61% of the actual weir counts, respectively.

Stocking Program

To increase road-accessible harvest opportunities and ensure sustainability of the area's wild Chinook salmon populations, SF began a program in 1999 to stock Chinook salmon at the Eklutna Power Plant tailrace (Figure 18). Ship Creek Chinook salmon are used as broodstock (Loopstra 2007). There are no wild Chinook salmon returns to the tailrace, although a few hold in the confluence area before traveling to other Knik River streams to spawn. Most fishing takes place in the one-half mile long power plant tailrace from the Old Glenn Highway to the confluence with the Knik River.

The tailrace was first stocked with Chinook salmon smolt in May 2002 (Table 31). A full complement of age classes of hatchery stock was realized with the release of smolt in 2006 and the return of the 2001 brood year. The largest harvest to date of 1,084 fish was observed in 2007. Small harvests have been observed since 2007, possibly due in part to the loss of warm water

production at the hatchery in 2006 combined with low marine survival. The newly built William Jack Hernandez Sport Fish Hatchery (WJHSFH) on Ship Creek began producing robust smolt of target size (15.9 g) in 2012 for release in 2013 (Table 31), ending a period of cold-water-only rearing (2006–2011). It is hoped that these larger and healthier smolt will offset poor marine survivals and contribute to stronger returns in the future.

Fishery Management and Objectives

The Chinook salmon fishing season for the Little Susitna River is from 1 January through 13 July, with fishing permitted from the river's mouth upstream to the Parks Highway, a distance of about 70 miles.

Management of Chinook salmon has undergone changes (Appendix B1). In 2002, an SEG range of 900–1,800 Chinook salmon was set for the Little Susitna River (Bue and Hasbrouck *Unpublished*), replacing the BEG of 850 Chinook salmon that was set in 1993.

During 1988, 1989, 1994, and 1995, years in which a weir program was conducted and Chinook salmon harvest estimates were available for the Little Susitna River, inriver exploitation rates were estimated at approximately 28%, 49%, 59%, and 38%, respectively (comparing Tables 29 and 30). These estimates indicate an increased rate of exploitation from 1988 to 1994 and show that inriver exploitation can exceed 50%. The Chinook salmon weir program ended after 1995. In 1995, in response to poor Chinook salmon returns, the BOF restricted the use of bait and limited the fishery to 6:00 AM–11:00 PM daily. From 1999 to 2008, the aerial index count of the escapements ranged from about 1,100 to 2,100 fish, and harvest varied from about 2,200 to 3,300 fish (Tables 29 and 30), indicating that the present regulatory framework is maintaining the necessary escapement to ensure a sustainable fishery over most years. Note that the index count is assumed to represent no more than half of the actual escapement.

The management objective for the Little Susitna River Chinook salmon fishery is to maximize fishing opportunity while ensuring the attainment of the SEG. The annual objective for the Eklutna tailrace stocking program is to release 150,000 Chinook salmon smolt, resulting in a return of 4,000 adults and generating 10,000 angler-days of effort (ADF&G Statewide Stocking Plan, <http://www.adfg.alaska.gov/index.cfm?adfg=fishingsportstockinghatcheries.stockingplan>, accessed January 2017). The only other Knik Arm Unit Chinook salmon stream indexed annually is Moose Creek, a tributary of the Matanuska River, but there is no escapement goal or associated fishery.

In the near future, NCI managers will be looking for signs of reduced returns from brood year 2011 due to a 100-year flood, which swept much of the NCIMA during the last 2 weeks in August 2012. Even though the recent Chinook salmon downturn is a statewide issue and probably marine derived, the flood occurring in 2006 may have contributed to the intensity of area downturns occurring from 2010 to 2012. Similarly, the number of Chinook salmon returning in 2016–2018 as age-4 to age-6 fish could be affected by the 2012 flood.

Beginning in 2012, a management strategy was developed and preseason action taken to reduce harvest up to 50% from previous years across the Susitna and Little Susitna river drainages (Appendix D1) in an effort to address the Chinook salmon downturn with a variety of restrictions that would spread harvest evenly across the season and provide consistent fishing opportunity throughout the season. A reduction of 50% on the Little Susitna River was based on the 2012 run being similar in size to the 2010 and 2011 runs. The 2010 and 2011 inriver runs were probably

similar in size to each other; however, the SEG of 900–1,800 was missed in 2010 by a substantial margin, with action taken too late in the season for meaningful savings. The SEG was narrowly missed in 2011 after the fishery was closed midway through the season to save the remaining 35–40% of the run. The preseason strategy in 2012 restricted harvest to 4 days per week (Fridays–Mondays) and allowed catch-and-release fishing on the other 3 days of the week (Tuesdays–Thursdays); the annual limit was reduced from 5 to 2 Chinook salmon over 20 inches and gear was restricted to single hook only. Early during the 2012 season, harvest numbers reported at the Little Susitna Public Use Facility (LSPUF) fee booth indicated a below average run was transpiring with catch rates much lower than anticipated. Guides and anglers reported a general absence of Chinook salmon in the lower Little Susitna River and a staff survey corroborated those reports. The 2012 run appeared weaker than in 2011, less than the preseason strategy allowed. The sport fishery was closed on 15 June, 2 days earlier than in 2011, which resulted in a harvest reduction of about 80% from previous years all restrictions included. The SEG was achieved with an aerial count of 1,154 spawners, within the SEG range (Table 30; Figure 17). Survey conditions were excellent.

Sport Fishery Performance and Escapement in 2013

The management strategy implemented during 2012 was refined for 2013 to prohibit 1 additional day of harvest, allowing harvest to occur only 3 days per week (Fridays–Mondays). All other restrictions remained the same as those in 2012. A 75% reduction in harvest was targeted in 2013 and assumed a run size similar to 2012, when a 50% reduction in harvest was implemented. A weir was operated at RM 32.5 to count the escapement of Chinook salmon and assess run strength inseason. The weir was installed early on 19 May; however, a late and intense spring breakup resulted in high water levels 2 days later, which inundated the weir. The weir crews had difficulty maintaining a functional weir through 21 June, about 60% of the way through the historical run. Angler and guide reports of fishing success indicated run strength was at least as good and possibly greater than this period in 2012. The high water levels likely provided savings in addition to those expected in the preseason strategy. Therefore, no further action was necessary even in the absence of weir counts. The weir was effective in counting the last 40% of the historical run. From 22 June through the end of the Chinook salmon fishing season, 13 July, about 2,000 Chinook salmon were counted, indicating the SEG would likely be attained when later counted by air. Past comparisons of weir versus aerial index counts have shown that 40–60% actual escapement is most often counted in the aerial survey. An aerial index survey conducted on 17 July counted 1,651 spawners, within the SEG range (Table 30; Figure 17). Survey conditions were exceptional. Because the weir was mostly inoperable through the majority of the season, the weir count cannot be used to estimate the proportion of the escapement counted in the aerial index count nor can run timing for 2013 be assessed. A weir will be operated at RM 32.5 again during the 2014 season. Sport harvest of Chinook salmon from the Little Susitna River was 336 fish, less than half the 2008–2012 average of 1,161 fish (Table 29).

Catch rates reported by anglers at the Eklutna Tailrace were low through most of the 2013 Chinook salmon fishing season. ADF&G staff observations of fishing at Eklutna Tailrace substantiated the angler reports. Harvest of Chinook salmon at the Eklutna Tailrace in 2013 was about 160 fish (Table 29). In 2013, about 260 fish were counted during the Moose Creek survey (Table 30). Chinook salmon harvest in the KAMU accounted for approximately 17% of the total Chinook salmon sport harvest from NCIMA waters during 2013 (Table 32).

EASTSIDE SUSITNA MANAGEMENT UNIT CHINOOK SALMON FISHERIES

Fishery Description

The ESMU (Figure 1) is composed of 3 distinct geographical areas with different regulations: 1) the eastside Susitna River tributaries between the Deshka and Talkeetna rivers (Figure 19), 2) the Talkeetna River (Figure 20), and 3) the upper Susitna River area, which includes the Susitna River and its tributaries between the Talkeetna River and Oshetna River (including the Oshetna River drainage (Figure 21) and all eastside tributaries of the Chulitna River (including the East Fork drainage of the Chulitna River).

Deshka to Talkeetna Rivers Area

Tributaries of the Deshka to Talkeetna rivers area (Figures 19 and 20) are numerous and are characterized by their clear water. The majority of the fisheries in this portion of the management unit are accessible by road. There are exceptions, including Little Willow and Greys creeks and various Susitna River side sloughs that require a boat to access their most productive portions. The George Parks Highway (Alaska Route 1), which connects Anchorage and Fairbanks, parallels the Susitna River on the east. The Alaska Railroad also parallels the east side of the Susitna River to a large extent. Both transportation systems provide angler access to numerous tributaries. These streams are considered only moderate producers of Chinook salmon and are susceptible to high use. Therefore, regulations are more conservative than in any other areas with respect to time and area. Streams within this area are generally managed as a unit because independent actions taken on one stream can transfer a significant amount of effort to adjacent fisheries.

Talkeetna River

The Talkeetna River joins the Susitna River about 98 miles upstream from Cook Inlet. This glacial system contains 2 major and numerous minor clear water tributaries that support Chinook salmon (Figure 20). Clear Creek is the most prominent Chinook salmon fishery within the Talkeetna River drainage. The Talkeetna Spur Road provides access to the Talkeetna River; however, a boat is required to reach virtually all Chinook salmon fisheries within the drainage. This area is primarily accessed from the Talkeetna boat launch.

Upper Susitna River Area

The upper Susitna River area (Talkeetna to Devils Canyon; Figure 21) is accessible only by boat or railroad. A public boat launch adjacent to the community of Talkeetna provides access to the area. Boat travel is relatively safe from the Talkeetna River upstream to the entrance of Devils Canyon, a distance of about 55 miles. Boat travel beyond the entrance to Devils Canyon is extremely hazardous and few boat operators venture past this location. Indian River and Portage Creek are the most prominent Chinook salmon fisheries within the Upper Susitna River Area. The entrance to Devils Canyon, beyond which salmon cannot migrate, is about 150 miles upstream from Cook Inlet.

The Chulitna River empties into the Susitna River a short distance upstream of the Talkeetna River at RM 92. Most tributaries entering the Chulitna River from the east are relatively short, high gradient streams, which receive few spawners. The exception is the East Fork, currently the only Chulitna River tributary supporting a Chinook salmon fishery (Middle Fork, West Fork mouth, and lower Honolulu Creek are included in this fishery).

Stocking Program

Willow Creek was identified in 1981 as a candidate for Chinook salmon stocking in the Cook Inlet Regional Salmon Enhancement Plan (CIRPT 1981). A Chinook salmon smolt stocking program was initiated in 1985 and the program has continued annually with the exception of 1987. The current goals of this program are as follows: 1) maintain the present quality and quantity of natural Chinook salmon production; 2) produce, through stocking, an additional 4,000 returning Chinook salmon, of which 1,750 Chinook spawn naturally, as assessed by aerial survey; and 3) provide 10,000 angler-days of annual weekend and weekday fishing opportunity directed at stocked Chinook salmon in Willow Creek.

A project to estimate the relative contribution of stocked Chinook salmon to the sport harvest was conducted at the mouth of Willow Creek annually from 1988 to 2005. The program ended when harvests of stocked fish became well documented and relatively stable, averaging about 40% of the total harvest and ranging from 26% to 51% for 1991–2005, years in which a full complement of stocked fish returned (Sweet 1999; Whitmore and Sweet 1998, 1999; Rutz and Sweet 2000; Sweet and Rutz 2001; Sweet et al. 2003, 2004). The contribution of hatchery fish to the escapement in Willow Creek and Deception Creek continues to be monitored by staff annually. An estimated average of 2% of hatchery fish stray into the Willow Creek escapement annually (calculated from Table 33 for 2005–2013). The newly built WJHSF Hatchery on Ship Creek began producing robust smolt of target size (13g) in 2012, ending a period of cold water only rearing (2006–2011) when the numbers (as low as 111,322 in 2007 from a high of 262,063 in 2003) and quality (mean weight as low as 6.8 g in 2007) of stocked fish had diminished (Table 34). It is hoped that these larger and healthier smolt will lead to stronger returns and achievement of egg-take goals in the future. Smolt to adult survivals through 1996 of 0.6–1.5% were below the original target of 3% (Sweet 1999) for Willow Creek. However, this low survival was probably during a period of better marine conditions than is currently being experienced suggesting survivals may become lower, even with healthier smolt. In consideration of survivals less than 1%, an effort is underway to increase the current stocking level by 2014 in order to approach the current program objectives.

Historical Harvest and Escapement

Information about the fishery and Chinook salmon stock is available from the SWHS, creel surveys, escapement surveys, and tagging studies. In the Deshka to Talkeetna rivers area, most of the Chinook salmon harvest occurs the third and fourth weekends in June because few Chinook salmon arrive at the mouths of eastside Susitna tributaries prior to mid-June. At the Talkeetna River, the fishery peaks the first week in July. The Upper Susitna River fishery has run timing similar to the Talkeetna River.

Tagging studies have shown that Chinook salmon stocks from Willow Creek, the Talkeetna River, Sheep Creek, and Montana Creek are subject to harvest at stream mouths other than their natal stream (Peltz and Sweet 1992). For example, Chinook salmon stocks from the upper portions of the drainage, such as Prairie Creek, are harvested at stream mouths along their migration corridor. The magnitude of nonnatal stream harvest has not been determined.

Creel surveys were employed from 1979 to 1989 to monitor fishing effort and harvest of Chinook salmon and to collect biological samples from catch at Montana Creek and the Talkeetna River. In 1991, 1992, and 1995, creel surveys were conducted for the Talkeetna River. Biological samples were collected from the Talkeetna River during the 1993, 1994, and 1996

seasons. Creel surveys were intermittently conducted at Sheep, Goose, Caswell, Little Willow, Sunshine, and Birch creeks and within the upper Susitna River area. Findings from these surveys are documented in ADF&G annual reports (Watsjold 1980, 1981; Bentz 1982, 1983; Hepler and Bentz 1984; Hepler and Bentz 1985; Hepler and Bentz 1986, 1987; Hepler et al. 1988; Hepler et al. 1989; Sweet and Webster 1990; Sweet et al. 1991; Peltz and Sweet 1992; Peltz and Sweet 1993; Sweet and Peltz 1994; Whitmore et al. 1996; Whitmore et al. 1995; Whitmore and Sweet 1997).

ESMU fisheries average about 30% of the total NCIMA Chinook salmon harvest (calculated from Table 32). From 1979 to 1993, harvest trended upward from about 1,300 Chinook salmon in 1979 to about 22,700 in 1993 (Table 32), representing a period of fishery growth. From 1996 to 2002, harvest remained between 10,400 and 17,000 fish. Harvest steadily declined after this period to 2,710 fish in 2011. Below average harvest reflects diminished runs after 2006 and subsequent restrictions placed on the sport fisheries within the ESMU (Appendix B1).

Historically, approximately 500–4,000 hatchery fish, taken in the Willow Creek sport fishery, have contributed to the annual ESMU harvest. Due to disease issues in 2006 and decreased smolt size from 2007 to 2011—the result of cold water rearing at the Fort Richardson Hatchery—fewer numbers than in 2003 and 2004 and poorer quality fish were stocked (Table 34). Additionally, poor marine survival of all Alaskan stocks has resulted in low runs since 2007. Although the ramifications of reduced stocking and poor marine survival are unmeasured, it is speculated that fewer hatchery adults have contributed to this fishery beginning in 2008.

Willow Creek, the Talkeetna River, Montana Creek, and Sheep Creek traditionally produce the largest harvest of Chinook salmon in the ESMU. The 2003–2007 average annual harvest for these fisheries was 2,721, 1,949, 1,321, and 949 fish, respectively (Table 35). By comparison, the 2008–2012 average annual harvest for the same fisheries was 423, 1,135, 438, and 270 fish, respectively. Low runs to these rivers and emergency restrictions contributed to the decrease in harvest levels. All Parks Highway streams within Unit 2 of the Susitna River were restricted by EO during 2009–2013 (Appendix D1).

Aerial survey escapement counts suggest that ESMU stocks compose about 40% of the mean Susitna River Chinook salmon escapement (1979–2012; Table 36). Prairie Creek, a headwater tributary of the Talkeetna River, has historically received the largest escapements, with an average escapement of 3,492 Chinook salmon from 2003 to 2012 (Table 37). Escapements among eastside streams have trended downward since about 2005, but more drastically after 2007.

Fishery Management and Objectives

Management of Chinook salmon in the Eastside Susitna Unit has undergone numerous changes since the 1980s as has management of Chinook salmon in the entire NCIMA (Appendix B1).

The Deshka to Talkeetna rivers area (Unit 2 of the Susitna River), often referred to as the Parks Highway streams, are managed collectively because of their close proximity to each other and potential for high use. Since these sport fisheries reopened in 1979 after a period of closure, a weekend-only fishing strategy has been cautiously developed. The most liberal regulations, adopted by the BOF in 2005, followed a period of strong runs and allowed for 3 consecutive 3-day weekends following the third Monday in June. However, by 2011, in the midst of a statewide Chinook salmon downturn, the last weekend of fishing was dropped. Currently by

regulation in the Deshka to Talkeetna rivers area (Unit 2 or Parks Highway streams), waters within one-quarter mile of the Susitna River are open to Chinook salmon fishing from 1 January through the third Monday in June and on Saturday, Sunday, and Monday for the next 2 consecutive weeks. For the Willow, Little Willow, Caswell, Kashwitna, Sheep, Goose and Montana creeks (Figure 19), fishing is allowed from the Susitna River upstream to the Parks Highway. Fishing on Montana Creek extends one-half mile upstream of the Parks Highway Bridge.

By regulation, the Talkeetna River and upper Susitna River drainages are open to Chinook salmon fishing from 1 January through 13 July, from 6:00 AM to 11:00 PM. Bag and possession limits are 1 fish per day and 1 in possession. Within the Talkeetna River area, Clear Creek is open upstream to RM 2. Both Larson and Prairie creeks are closed to Chinook salmon fishing. Eastside Chulitna River tributaries are closed to Chinook salmon fishing with the exception of the East Fork Chulitna and its tributaries. Harvest is allowed within a quarter mile of the confluence of the East Fork and West Fork of the Chulitna River (including the Middle Fork) and the first quarter mile of Honolulu Creek under the weekend-only management strategy described for the Deshka to Talkeetna rivers area. During the rest of the week, only catch-and-release fishing is allowed. The portion of the Susitna River above the Talkeetna River is designated as a trophy fishery for rainbow trout; therefore, only unbaited, single-hook artificial lures are permitted as terminal gear.

SEG ranges for 9 ESMU streams were established in 2002 (Table 28) based on historical escapement index counts (Bue and Hasbrouck *Unpublished*). The Deception Creek SEG was removed at the 2005 BOF meeting (Hasbrouck and Edmundson 2007) because Deception Creek is managed as part of Willow Creek. The management objective for these 8 streams is to achieve the escapement goal for each system. In the streams that cross the George Parks Highway, management strategies provide maximum levels of sustained Chinook salmon fishing opportunity while attaining escapement objectives.

Due to the downturn in Chinook salmon runs, which was first recognized in 2007, fisheries have become increasingly restrictive, and since 2009, EOs have been issued in every year. Willow and Goose creeks were designated as stocks of yield concern at the 2011 BOF meeting. The BOF closed Goose Creek and placed additional restrictions on other streams within Unit 2 of the Susitna River in an effort to reduce harvest by 50% and thereby boost escapement levels. The last weekend of fishing, added in 2005, was removed from regulation in addition to only allowing fishing from 6:00 AM to 11:00 PM (Appendix B1). Sheep and Goose creeks share a common channel created in 1971 by a flood that caused a breach in the Sheep Creek channel. Despite efforts to prevent Sheep Creek water flowing into this channel, it persists and is part of the Goose Creek aerial survey index area. Beavers progressively colonized this channel and since 2009, a multigenerational beaver dam blocks fish passage upstream of the confluence of this channel with Goose Creek in some years. The beaver dam likely reduced the number of spawning salmon above this location by an unknown amount, but aerial surveyors typically observe the majority of spawning Chinook salmon below the location of the dam. It is unknown what effect the dam has had on juvenile rearing habitat.

BOF action taken in 2011 to decrease harvest in ESMU streams was insufficient to achieve the desired escapement objectives in 2011. The 2011 Chinook salmon harvest from the ESMU was 2,710 fish, approximately 66% less than the 2001–2010 average harvest of 7,840 fish (Table 32). Although harvest was probably reduced through added restrictions as intended by the BOF,

escapements to eastside streams were lower than the previous year, and all streams along the Parks Highway, with the exception of Little Willow Creek and the Chulitna River, failed to achieve escapement goals (Figure 22). Beginning in 2012, preseason action was taken by EO to reduce harvest up to 50% across the Susitna and Little Susitna river drainages. An areawide restriction reduced the annual limit to 2 Chinook salmon over 20 inches and allowed use of only 1 single hook with an artificial lure. Parks Highway streams within Unit 2 of the Susitna River were further restricted to catch and release only after the second Monday in June in addition to the areawide blanket (Appendix D1). Staff were present during the weekend outlined in regulation (16–18 June) when fish were expected to be caught in moderate numbers, and they observed low catch rates overall. Helicopter surveys conducted during 25–26 June over eastside streams and on Clear Creek of the Talkeetna River confirmed poor numbers of Chinook salmon holding in the lower reaches of these systems. Eastside streams, along with the rest of the Susitna River drainage, were closed to Chinook salmon fishing beginning 25 June. Despite Unit 2 streams being reduced in harvest by over 95%, escapements to several streams were of record low numbers, including Willow and Montana creeks (Table 37). In general, runs to eastside streams were lower than in 2011. The SEG on Little Willow Creek was met. Savings on the Talkeetna River approached a similar level as that of Unit 2 streams as a result of the closure; however, final index counts were mixed, with Clear Creek achieving its SEG with a count of 1,177, whereas a count of 1,185 on Prairie Creek was the lowest on record.

Sport Fishery Performance and Escapement in 2013

The preseason management strategy implemented during 2012 was refined for 2013 to allow only catch-and-release fishing for Chinook salmon beginning 1 May through 13 July. Essentially all Chinook salmon fisheries within the ESMU, including Units 2, 3, 5, and 6, were included in this restriction. All other restrictions related to annual limit and terminal gear remained the same as those in 2012 (Appendix D1). A 100% reduction in harvest was targeted in 2013 and assumed a run size similar to 2012. A weir was operated on Montana Creek and the East Fork of the Chulitna River through a separate research project; however, escapement data gathered at these sites are too far upstream on the Susitna River drainage to provide timely information that can be used for inseason management decisions. Staff surveys of anglers participating in the catch-and-release fisheries during the weekends of 22–23 June and 29–30 June indicated fishing success to be fair to good. Rainbow trout anglers routinely reported Chinook salmon staging and ascending the lower reaches of streams crossing the Parks Highway. An inseason helicopter survey flown on 24 June corroborated those reports. Aerial index surveys conducted during the last 2 weeks in July (Table 37) showed 5 of 7 SEGs on measured streams were met in the ESMU. Willow and Goose creeks are stocks of yield concern; each had missed its respective escapement goal for the previous 6 years. Willow Creek achieved its goal in 2013 with an aerial count of 1,752 (SEG 1,600–2,800), whereas the Goose Creek count of 62 was again below its goal (SEG 250–650). It should be noted that the Goose Creek count was incomplete due to glacially silted water bleeding into the creek by way of a channel connecting it with Sheep Creek. Though the count is unreliable, the surveyor felt the majority of Chinook salmon were counted. The Chulitna River also failed to achieve its SEG in 2013. Sheep Creek was the only index stream not counted in 2013 due to poor water visibility (Table 37).

WESTSIDE SUSITNA MANAGEMENT UNIT CHINOOK SALMON FISHERIES

Fishery Description

The WSMU includes all westside drainages of the Chulitna River, all westside drainages of the Susitna River below its confluence with the Chulitna River, and, primarily for management purposes, eastside drainages of the Susitna River within a half mile of the Susitna River downstream of Willow Creek. Major tributaries within this unit that support Chinook salmon fisheries include the glacially turbid Yentna River, the largest tributary of the Susitna River, which flows into the Susitna River about 30 miles upstream from Cook Inlet; the Deshka River, with its confluence at RM 40 of the Susitna River; and Alexander Creek (confluence at RM 10 of the Susitna River). The Deshka River produces the largest run of Chinook salmon to the NCI area; these fish exhibit early run timing due to the relative closeness of the Deshka River to the mouth of the Susitna River. Lake Creek (64 miles from the mouth of the Susitna River at RM 34 of the Yentna River) supports the largest Chinook salmon fishery on the Yentna River.

Access to these relatively remote fisheries is primarily by boat or aircraft. Susitna Landing, located at the mouth of the Kashwitna River, and Deshka Landing, located about 4 miles upstream from the Deshka River, are the principal boat access sites on the Susitna River. A few anglers also gain access to WSMU fisheries by traversing Cook Inlet by boat from the Port of Anchorage. The Petersville Road provides the only vehicular access to this portion of the Susitna River drainage, allowing access to the upper reaches of the Deshka River and Peters Creek.

Historical Harvest and Escapement

Information about the WSMU fisheries and Chinook salmon stocks is available from the SWHS, weirs, and escapement surveys. Chinook salmon enter WSMU tributaries in May and June. Harvest at the mouth of the Deshka River peaks during mid-June, and at Lake Creek the peak harvest usually takes place during the third week in June.

The WSMU supported the largest harvests of Chinook salmon within the NCIMA from 1979 to 1991 (Table 32) and again after 2000; ESMU dominated harvests 1992–1999. Within the unit, the Deshka River, Alexander Creek, and Lake Creek historically supported the largest Chinook salmon fisheries until Alexander Creek was closed to Chinook salmon fishing in 2008 (Table 38). More recently, the Deshka River, Lake Creek, and the Talachulitna River have generated the largest harvests in this unit—about 80% from 2008 to 2012. The Deshka River has historically provided the largest Chinook salmon harvest within the entire NCIMA (Table 38), except during the mid-1990s when the fishery was closed due to low observed escapements.

Harvest by major WSMU fisheries increased substantially from 1979 to 1993 (Table 38), probably a result of improved access (as described in Whitmore et al. 1994) and population growth. However, liberalized regulations from 1986 to 1992 also contributed to increased harvests.

Escapements have been monitored annually in 6 tributaries using aerial surveys (Table 39). A weir has been used to census escapements to the Deshka River since 1995 (Table 39). From 1991 to 1996, Chinook salmon spawning abundance in most WSMU tributaries fell below escapement goals for some years (Table 39). At the Deshka River, Chinook salmon escapement index counts indicated an alarming decline during this period, whereas the average sport harvest of Chinook salmon from 1990 to 1992 was approximately 40% greater than the average harvest during the previous 10 years (Table 38). In response, restrictions were implemented on major WSMU

streams, and the Deshka River was closed to Chinook salmon fishing from 17 June 1994 to 21 June 1997 (Appendix B2). The escapement goal for the Deshka River of 11,200 Chinook salmon, counted by aerial survey, was not met from 1991 to 1996 (Table 39). Overall harvest dipped to an average of 6,700 fish from 1995 to 1997, then after rebounding in 1998, runs stabilized at about 14,000 fish over the next 10 years and continued through a period of high run years that ended in 2006. Throughout this period, SEGs were met for all streams except Alexander Creek. Alexander Creek escapement counts began a steep downward trend beginning in 2006 (Table 39). The Alexander Creek fishery has been closed since 2008 and has been designated a stock of management concern since 2010. Managers suspect northern pike have contributed to reduced Chinook salmon productivity in the Alexander Creek drainage, and a large-scale northern pike suppression program is underway (see northern pike section). It is likely that a combination of northern pike predation and poor marine survival are responsible for the low productivity of Alexander Creek Chinook salmon.

Harvest and escapement have dropped sharply since 2006 as a result of low inriver runs and subsequent EOs issued to restrict fisheries (Appendix D1). On the Deshka River, the largest WSMU Chinook salmon fishery, harvest dropped from an average of 7,200 Chinook salmon in 2003–2007 to 2,186 fish in 2008–2012 (Table 38). The Deshka River did not achieve its escapement goal in 2008 and 2009, but has achieved its goal since (Table 39).

Fishery Management and Objectives

Management of Chinook salmon in the WSMU has undergone numerous changes since the 1980s, as has management of Chinook salmon in the entire NCIMA (Appendix B1). These changes reflect periods of strong Chinook salmon runs during most of the 1980s and from about 1997 to 2006, surrounded by periods of weak runs (1991–1996 and 2007–present).

Currently, the bag limit for WSMU Chinook salmon fisheries is 1 fish daily and 2 in possession. A seasonal limit of 5 Cook Inlet Chinook salmon also applies. Only unbaited, single-hook artificial lures are allowed in large portions of Lake Creek and the Deshka and Talachulitna rivers. Sport fishing guides may not participate or engage in fishing for Chinook salmon while clients are present or within their control.

An escapement monitoring weir at RM 7 of the Deshka River is an important tool for managing Chinook salmon returning to the Susitna River because of large observed escapements and relatively early run timing due the river's closeness to the mouth of the Susitna River. The Deshka River weir operates from mid-May through the duration of the Chinook salmon season to provide managers with timely inseason run information, as well as postseason biological data that are used to assess productivity in this system (Appendix I1). A weir-based SEG range of 13,000–28,000 fish was established for the Deshka River based on actual escapement, age, and harvest data gathered at the weir. SEG ranges for 4 other WSMU systems (Lake, Alexander, and Peters creeks, and the Talachulitna River) were also established in 2002 (Table 28). SEGs were based on historical aerial index counts of escapement (Bue and Hasbrouck *Unpublished*). The management objective for these 5 systems is to achieve the escapement goals while providing maximum levels of Chinook salmon fishing opportunity.

A weir has been the cornerstone for inseason management of the Chinook salmon fishery on the Deshka River since its inception in 1995. Over recent years, a preseason outlook of run size to the Deshka River has been used for early inseason management. The preseason outlook uses sibling regression to predict the number of returning age-5 and age-6 fish. It also uses a spawner-

recruit relationship combined with the average proportion of age-4 spawners to predict the number of age-4 fish. Harvest is incorporated to estimate total run size. The SWHS is generally used to estimate sport harvest, whereas marine harvest is estimated by taking a proportion of the combined harvests in the Northern District directed commercial setnet, the Tyonek subsistence, and the Kustatan subdistrict commercial setnet fisheries. That proportion is determined from the aerial survey count of the Deshka River Chinook salmon escapement divided by the sum of all aerial Chinook salmon counts in the NCI area. The outlook has limited utility as a management tool because of the variability in precision of the various models used in forecasting the 3 major returning age classes; the outlook has been off by an average of 8,000 fish, mostly overestimating run forecasts. It is useful as an index of expected run strength but should not be used alone for making management decisions.

The Deshka River weir has also provided insight into the accuracy of the aerial counts. Comparisons of aerial and weir counts for the Deshka River during 1995–1997, 1999, 2002, and 2004 showed that an average of 45% of the weir count is counted in the aerial survey (Ivey 2014). A significant linear regression describes the relationship, which has been used to estimate escapement from aerial indices on years of incomplete weir counts and for years prior to the weir program (Ivey 2014).

Inseason liberalizations to the Deshka River Chinook salmon fishery were common in 2000–2006 (Appendix B2) because the Deshka River escapement exceeded the escapement goal of 17,500 fish from 1999 to 2001 and exceeded or was within the more recent SEG range from 2002 to 2007 (Figure 23). Escapements trended downward after 2007, likely the result of poor marine survival. In 2008, inseason information from the weir indicated a weak run and the fishery was closed by 19 June. In 2009, the outlook indicated the low end of the goal would be achieved; however, the outlook had overestimated the forecast of the age-4 component of the run in the past and led to concern over achieving the goal, and therefore preseason action was taken to reduce harvest by restricting harvest to Saturdays–Mondays only and not allowing bait. A lower than anticipated run forced a closure of the Deshka River on 11 June at the quarter point of the historical run. The low count in 2009 was due to a record low return of age-5 and age-6 fish rather than a low return of age-4 fish, as projected (Richard Yanusz, Fishery Biologist, ADF&G, Division of Sport Fish, Palmer, personal communication). The Deshka River goal was missed in 2008 and 2009 (Table 39). The goal was attained 2010–2011 near the midpoint of the goal range (SEG 13,000–28,000) with minimal inseason change.

During 2012, preseason action was taken to reduce harvest up to 50% across the Susitna and Little Susitna river drainages. An areawide restriction reduced the annual limit to 2 Chinook salmon over 20 inches and allowed use of only 1 single-hook artificial lure. Fishing at the mouth of the Deshka River was mostly good, but catches were considered lower than the previous 2 seasons. A weir located at RM 7 was used to evaluate run strength daily throughout the season. Projections of escapement lagged through the first half of the average run. This information, in addition to staff surveys of Lake Creek and eastside streams, justified closing the entire Susitna River drainage effective 25 June. A helicopter survey of Lake Creek on 26 June substantiated low numbers of Chinook salmon in Lake Creek. The Deshka River SEG was achieved on 7 July. The final weir count was 14,096 Chinook salmon, which was within but near the low end of the SEG (Figure 23). Preseason action taken to reduce the annual bag limit to 2 fish, coupled with bait restriction and subsequent closure may have reduced harvest on the Deshka River by 25–30%. The run to the Deshka River was approximately 2 days late. The SEG of 2,500–7,100

at Lake Creek was narrowly missed with a final aerial count of 2,366, despite an anticipated savings of about 35–40% by management actions (Table 39).

Northern pike have probably reduced Chinook salmon productivity in the Alexander Creek drainage through predation on juvenile salmon. Low escapement counts beginning in 2006 resulted in the sport fishery being closed by BOF action in 2008. Currently, an effort is underway to suppress the northern pike population in Alexander Creek through annual gillnetting (see northern pike section).

Areawide flooding has been an issue within the past decade. A 100-year flood swept much of the NCIMA during August 2006. This flood would have affected major age classes returning in the years 2010–2012, further compounding diminished returns thought to have been caused by poor marine survival since 2007. A similar large flood occurred in September 2012; runs occurring from 2016 to 2018 could be affected.

Sport Fishery Performance and Escapement in 2013

An extremely late spring breakup and high waters delayed installation of the Deshka River weir until 9 June, about 2 weeks late. Based on angler reports and staff observations, Chinook salmon also arrived to the river late, so that it was generally felt that few if any fish escaped uncounted. Fishing at the mouth of the Deshka River was good for a short period of time in early June and then diminished to poor by about 13 June at the first quarter of the historical run. Poor fishing success was attributed to warm waters on the Deshka River due to unseasonably warm weather experienced during the majority of June (Appendix II). High water temperatures are sometimes experienced on the Deshka River later in the summer under conditions of low water, and the combination of low water and high temperature has stalled upstream coho salmon migration in the past; however, this phenomenon had never been observed or at least documented for Chinook salmon on this system. Fishing success remained poor and daily weir counts were low through 20 June. Throughout this period, reports from anglers and regular staff surveys indicated a strong number of Chinook salmon holding in the Susitna River along a 460 m stretch of river immediately downstream of the Deshka River confluence. Even though projections of escapement were low through the first 50% of the run, managers delayed restricting or closing the fishery due to fish holding at the mouth and because few fish were being harvested in the sport fishery. A change in weather on 21 June resulted in a drop in water temperature, prompting fish movement and improving fishing success. Relatively large daily counts occurred during 21–27 June. The low end of the SEG of 13,000–28,000 fish was first projected on 25 June, and by 27 June, which was about 75% of way through the historical run, nearly 17,000 could be projected. An EO to restore use of bait was issued on Friday, 28 June, the day the low end of the SEG was attained. The final weir count on the Deshka River was 18,531 fish. The run to the Deshka River was approximately 7 days late; however, late run timing was likely environmentally influenced by the later-than-typical spring followed by an unseasonably warm June. At Lake Creek, fishing was allowed 7 days per week, but harvest was only allowed Fridays–Mondays. Boat surveys by ADF&G staff and reports from anglers and guide business owners indicated fishing success was average and that the 4 day per week harvest strategy was indeed allowing fish to escape the sport fishery. Additional savings were likely made because the waters of the Yentna River remained high during most of June, backing up McDougal Slough with silted water and making it mostly unfishable. Most fishing occurred at the “upper mouth channel” of Lake Creek and in the Bulchitna Lake area. An aerial helicopter survey flown on 24 June showed Chinook salmon in traditional holding areas near Bulchitna Lake and further

upstream. No inseason change to harvest level was necessary on Yentna River tributaries. The SEG of 2,500–7,100 Chinook salmon at Lake Creek was achieved with an aerial count of 3,655 fish on 22 July (Table 39). All other goals (4 of 5) within the Westside Unit, with the exception of Alexander Creek, were attained.

WEST COOK INLET MANAGEMENT UNIT CHINOOK SALMON FISHERIES

Fishery Description

Prior to 2000, the WCIMU extended south from the mouth of the Susitna River to the West Foreland of Cook Inlet (Figure 24). Beginning in 2000, it was expanded to include all waters along the west side of Cook Inlet to the latitude of the southern tip of Chisik Island. Streams in the WCIMU, with the exception of the Chakachatna–McArthur and Beluga river drainages are relatively small, clearwater coastal drainages that originate in the Alaska Range, Aleutian Range, or from the slopes of Mount Susitna. The Chakachatna–McArthur and Beluga river drainages are largely glacial and receive minor use by Chinook salmon anglers. Beginning in 2000, the data in this report reflect harvest, effort, and catch data from the expanded management unit.

The Chuitna and Theodore rivers were the area’s most prominent Chinook salmon sport fisheries until they were closed in 2010 due to low returns (Table 40). Streams south of the West Foreland, namely the Kustatan River and Polly Creek, support small runs of Chinook salmon and generate only a small Chinook salmon harvest. Stocks from the WCIMU are also harvested in commercial fisheries as well as a subsistence fishery located near the village of Tyonek (Table 27).

Chinook salmon begin to arrive in the area during late May, with the peak of most fisheries occurring during mid to late June.

Access to the coastal fisheries of the WCIMU is by air or water because there is no road link to the Southcentral Alaska highway system. Helicopters are used to access the upper reaches of these streams, and airplanes, combined with the use of land vehicles, provide access to the lower reaches. A road network, built to facilitate oil and gas exploration and the timber industry, does exist in the Tyonek–Beluga area. Several gravel aircraft landing strips are present and a few roads also serve as runways. The village of Tyonek, with a population of nearly 200, is the area’s primary population center.

Historical Harvest and Escapement

In the 1990s, escapement goals were not met for some streams (Figure 25). The reduced abundance of spawning Chinook salmon in WCIMU may have been due to elevated sport harvest and flood-related mortality of eggs and juveniles in 1986. Inspection of the coastal streams after an October 1986 flood revealed substantial streambed scouring and channelization. In association with flooding, there was severe erosion, landslides, and subsequent deposition of earth and debris into the streams. The 1993 escapement index count showed an improvement over the previous 4 years, but decreased again in 1994. The 1994–1996 escapement counts for all streams were low. This trend finally reversed in 1997–1999 when all escapement goals were met (Figure 25). Run strength continued to be good through 2005, except that the Theodore River escapement was marginally less than the lower end of the SEG range in 2004 and 2005 (Table 41). All goals were met in 2006. Since 2006, escapements on these 3 streams have trended downward and SEGs have been missed (Figure 25). A spawning escapement survey conducted on the Lewis River on 17 July 2007 counted zero Chinook salmon. Upon

investigation, it was found that the river had overflowed its bank about one-half mile below the bridge and was flowing into a large swampy area. After the channel was restored, the river was again surveyed on 7 August to check for evidence of spawning. No Chinook salmon were observed spawning in the Lewis River in 2007.

Sport angler harvest of Chinook salmon on the Chuitna River was as high as 1,185 fish (1983). However, in 2009 only 109 fish were harvested (Table 40) and in 2010 the Chinook salmon fishery was closed pre-season by EO. The fishery was closed by BOF regulatory action prior to the 2011 season and has remained closed since. The average escapement from 1979 to 2007 was 1,937 fish. A more recent average (2008–2012) was 716 fish (Table 41). The sustainable escapement goal (SEG) for Chinook salmon returning to the Chuitna River is 1,200–2,900 fish. Despite restrictive action since the mid-1990s and closure of the sport fishery in 2010, the lower bound of this goal was not achieved 2007–2012.

Sport harvest of Chinook salmon from the Theodore River peaked in 1986 at 1,400 fish and decreased to 183 prior to regulatory changes that closed the sport fishery in 1996. In 1999, sport fishing was restricted to catch-and-release. Chinook salmon escapements into the Theodore River have also declined (Figure 25). The average aerial index count from 1979 to 2007 was 1,068 fish. A more recent average (2008–2012) was 281 fish (Table 41). The SEG for Chinook salmon returning to the Theodore River is 500–1,700 fish. The Theodore River has failed to meet the SEG since 2007 despite being catch-and-release only since 1999 and closed since 2010.

On the Lewis River, sport harvest was greater than 150 fish annually from 1987 to 1990, but the sport fishery was closed by regulation in 1996 and then restricted to catch-and-release by regulation beginning in 1999 (Appendix B1). The average aerial index count from 1979 to 2007 was 533 fish. A more recent average (2008–2012) is 97 fish (Table 41). The Lewis River SEG for Chinook salmon is 250–800 fish. The Lewis River failed to meet the SEG for Chinook salmon 2007–2010 despite a catch-and-release sport fishery since 2002 and closure beginning in 2010.

Fishery Management and Objectives

SEGs for 3 WCIMU streams were established in 2002 (Table 28), based on historical escapement index counts. The management objective for these 3 streams is to achieve the escapement goal while providing maximum levels of sustained Chinook salmon fishing opportunity.

West Cook Inlet Area Chinook salmon fisheries are open 1 January–30 June. The current bag and possession limit is 1 daily and 1 in possession, and a seasonal limit of 5 Cook Inlet Chinook salmon. Only unbaited, single-hook artificial lures are allowed in drainages between the mouth of the Susitna River and West Foreland. In drainages from West Foreland to the southern tip of Chisik Island, bait is allowed after 15 May. The Chuitna, Theodore, and Lewis rivers were closed by the BOF during the 2011 meeting due to failed escapements over a 4–5 consecutive year period. These systems remain designated as stocks of management concern. The Beluga River drainage was also closed at the 2011 meeting.

A 3-year project to count the escapement of Chinook salmon on the Theodore and Lewis rivers by weir was initiated in 2012 to assess the effectiveness of the aerial count as an index of the spawning escapement. The Chuitna River was the first choice for a weir program; however, it was found to be unsuitable for a weir and sonar was eliminated as an option because species

apportionment would probably impair estimates. Aerial surveys conducted on the Theodore River in 2012 and 2013 indicated that 27% and 70% of the escapement was counted from the air, respectively. On the Lewis River, count comparisons indicate 96% of the escapement was counted from the air; however, it is likely many Chinook salmon remained downstream of the weir prior to its removal on 3 August and were not included in the weir count. It was noted that 79 of 107 total fish counted during the aerial survey, conducted on 18 July, were downstream of the weir. Between 18 July and 3 August, only 16 Chinook salmon were counted through the weir. Additional years of comparisons would be necessary to adequately assess the consistency of these index counts over time. A weir versus aerial count comparison on the Lewis River was not possible in 2013. The 2013 aerial surveyors, while counting 61 Chinook salmon, also noted the Lewis River had overflowed its bank about one-half mile downstream of the bridge and was diverted into a large muskeg area with no outlet to Cook Inlet. It is speculated that the Lewis River jumped its channel after flooding that occurred the previous fall and that the Chinook salmon counted in the index survey during 2013 arrived during a period of high spring runoff when enough water existed in the old channel for adequate salmon migration and prior to when it was feasible to install the weir. The weir was installed on 11 June, when water levels were probably too low to wet the old channel below the point of diversion. A postseason effort was made to restore the channel to its original condition. The final weir count on the Lewis River was 2 Chinook salmon, both counted after 10 August, after the restoration effort.

Fishery Performance and Escapement in 2013

No harvest was reported in the WCIMU in 2013 (Table 40). The major WCIMU Chinook salmon fisheries occurring on the Chuitna, Theodore, and Lewis rivers have been closed since 2010, first by EO in 2010 and then by regulation beginning 2011 (Appendix B1). Beluga River drainage streams were also closed in 2011. Aerial index surveys were conducted in late July and although SEGs were missed on the Theodore and Lewis rivers, the SEG was attained on the Chuitna River with an aerial count of 1,690 Chinook salmon (Table 41), which is similar to the average escapement for 1979–2012. Prior to 2013, the SEG on the Chuitna River had not been achieved since 2006.

In 2013, weirs were operated on the Theodore and Lewis rivers during the second year of a 3-year project to enumerate the actual escapement and to estimate the proportion of the escapement counted in the aerial index count. The final weir count on the Theodore River was 684 fish. Only 2 Chinook salmon were counted through the Lewis River weir; a couple of factors may account for this, including missing some fish early in the season prior to when the weir could be feasibly installed and later changes in channel morphology that may have prevented Chinook salmon from entering the lower river from Cook Inlet.

COHO SALMON FISHERIES

AREAWIDE OVERVIEW

Areawide Historical Harvest and Escapement

Sport harvest of coho salmon in the NCIMA ranged from 17,206 to 105,252 fish from 1977 to 2012 and averaged 60,901 (Table 42). Harvest declined to 36,299 fish in 2011 and 29,890 fish in 2012 and coincided with poor runs to NCI in those years. The average harvest of 59,800 fish from 2008 to 2012 represented 17% of the coho salmon harvest in the Southcentral region and 10% of the statewide harvest (Table 42). Within the NCIMA, the KAMU, which includes the

Little Susitna River, accounted for the largest harvest of coho salmon through 2010 with the exception of 1999 and 2000, when harvest in ESMU surpassed it (Table 42). Since 2010, WSMU has dominated harvest in the NCIMA, followed by the ESMU. The WCIMU has fewer accessible streams than the other NCIMA management units. Coho salmon harvest in the KAMU was dominated by harvests from the Little Susitna River until 2006. Jim Creek harvest was slightly higher than harvest from the Little Susitna River during 2006–2009 and 2011–2012 (Table 43).

Areawide Fishery Management and Objectives

Management of coho salmon in the NCIMA has undergone numerous changes (Appendix B3). Each season, management strategies for NCIMA coho salmon are implemented as the stocks begin entering Cook Inlet and are intercepted, first by the commercial fishery and then the sport fishery.

As coho salmon enter fresh water, ADF&G has limited ability to gauge overall run size. Until 1997, counting weirs at the Little Susitna River and the Deshka River provided the only quantitative measure of coho salmon abundance in the NCIMA. Beginning in 1997, weirs were also operated in Wasilla, Cottonwood, and Fish creeks. The Wasilla Creek and Fish Creek weirs were discontinued after 2003, and the Cottonwood Creek weir was discontinued after 2004. The Fish Creek weir operated from 2009 to 2013, in cooperation with the United States Fish and Wildlife Service (USFWS), to count both sockeye and coho salmon escapements. Prior to 2009, the weir was removed around 15 August, half way through the historical coho salmon run. For 2009–2013, the weir remained in the creek until September. Fish wheels on the lower Susitna and Yentna rivers and foot and aerial index counts for a few streams also contribute information about relative abundance. Within the NCIMA, 8 index areas are surveyed annually by foot: McRoberts and upper Jim creeks (Knik River), Cottonwood and Wasilla creeks (Knik Arm), and Rabideux, Birch, Question, and Answer creeks (Susitna River). Ongoing abundance estimates of coho salmon in the Susitna River drainage should help determine if Deshka River weir counts provide a reliable index of run strength to the Susitna River drainage.

A creel survey to estimate coho salmon harvest and fishing effort was conducted at the Little Susitna River from 1982 through 1993. Intermittent or partial creel survey data have also been collected from other coho salmon fisheries in the area.

Poor runs in 1997 and 1999 prompted inseason restrictions to both sport and commercial fisheries. In response to a poor run of coho salmon to Cook Inlet in 1997, EOs were issued to close the commercial fishery and to institute an areawide bag limit reduction and bait prohibition for wild stock sport fisheries. Restrictive action was again taken in the commercial fishery in 1998 because of a poor sockeye salmon run. Because of the nature of the multispecies fishery, this action probably resulted in higher escapements. No additional action was required in the sport fishery during 1998 because instream coho salmon abundance seemed to be above the historical average. In 1999, poor runs again resulted in restrictions to the sport and commercial fisheries. Unfortunately, these restrictions were made too late to increase coho salmon escapement. Low escapements of coho salmon to UCI streams prompted the governor of Alaska and users of the coho salmon fishery to submit a request to the BOF to meet out of cycle and address this conservation problem. The BOF met in February 2000 and significant actions to both the sport and commercial fisheries were taken to reduce the overall harvest of Cook Inlet coho salmon (Appendix B3). Beginning later in 2000 and continuing through 2009, coho salmon

runs were mostly above average. From 2010 to 2012, runs of coho salmon across the NCI were again below average and considered to be particularly poor in 2011 and 2012. Escapement goals on the Little Susitna River and Jim Creek systems were missed in these years despite actions taken to restrict sport fisheries (Appendix D1). In 2011, the BOF made changes to the Central District Drift Plan (Appendix C1) during the last 2 weeks in July in an effort to pass more coho salmon to the Northern District. Changes to the plan were not implemented until the 2012 season; the intended effect of these changes may not be realized for many more years of monitored runs.

There has been growing interest in genetic stock identification (GSI) of coho salmon in Cook Inlet to help determine where northern stocks are harvested both temporally and spatially as they migrate through various fisheries to natal streams. Development of a genetic baseline for coho salmon stocks within Cook Inlet is currently underway. Meanwhile, genetic samples are being taken at the northern OTF line near Kalgin Island.

KNIK ARM MANAGEMENT UNIT: LITTLE SUSITNA RIVER COHO SALMON FISHERY

Fishery Description

Access to the Little Susitna River occurs at 3 primary locations: 1) intertidal waters of the river are accessed by boats crossing Knik Arm from the Port of Anchorage public boat launch; 2) the road-accessible Little Susitna Public Use Facility (Burma Road Access; LSPUF), which includes a launch and campground; and 3) private and public launches near the Parks Highway, which provide access to the upper reaches of the river. The Little Susitna Public Use Facility is the most heavily used access to the river. Powerboats can travel on the Little Susitna River from the mouth of the river to the Parks Highway during periods of moderate to high water levels. However, during low flows, travel is restricted to smaller jet boats between RM 28 and the Parks Highway at RM 70.

Coho salmon return to the Little Susitna River primarily from mid-July through early September. Tagging studies indicate that coho salmon migrate slowly up the Little Susitna River and remain available to the fishery for about 4 weeks, after which they pass the George Parks Highway Bridge into waters closed to fishing for salmon. Spawning takes place from late September through mid-October. Spawning primarily occurs upstream from the George Parks Highway in the mainstem of the river, but some spawning occurs in tributary streams.

Stocking Program

Stocking of coho salmon occurred at the Little Susitna River from 1982 to 1995. Beginning in 1987, returns from smolt releases started to make significant contributions to the sport harvest. The 1995 smolt release in Nancy Lake was the last stocking of hatchery coho salmon for the Little Susitna River. The program was terminated because it was no longer cost-effective to stock the Little Susitna River because of the strength of the natural run and the high cost of hatchery enhancement. A summary of the stocking program can be found in the following reports: Bartlett and Conrad (1988), Bartlett and Vincent-Lang (1989), Bartlett and Sonnichsen (1990), Bartlett and Bingham (1991, 1993), Bartlett (1992, 1994, 1996a-b).

Historical Harvest and Escapement

From 1977 to 2012, harvest of Little Susitna River coho salmon ranged from 1,618 to 27,610 fish with an average harvest of 11,543 fish (Table 43). It has been a consistent second to the Kenai River, which supports the largest freshwater coho salmon harvest in Alaska. Most recently, the Jim Creek harvest surpassed Little Susitna River harvest from 2006 to 2009, and again in 2011–2012 (Table 43).

Prior to 1986, coho salmon escapement to the Little Susitna River was indexed by either ground surveys, aerial surveys, or both when water conditions permitted. Coho salmon escapements have been counted at a weir on the Little Susitna River since 1986 (Table 44). The weir was operated from 1986 to 1995 in the lower river, several miles upstream of the LSPUF. The weir was moved and operated upstream of the Parks Highway Bridge at RM 71 from 1996 to 2011. Although most spawning occurs above the upper weir site, the weir was a poor tool for inseason management of the fishery due to a 40-mile separation from the main fishery. The weir was returned to the lower river site at RM 32.5 in 2012, where it remains.

During 1997 and 1999, the Little Susitna River (Table 44), as well as the whole NCIMA, experienced poor coho salmon runs. However, the stock rebounded by 2001 with a weir count of 30,587 coho salmon. A record escapement of 47,938 coho salmon occurred in 2002.

Harvest estimates from the SWHS and escapement data indicate that coho salmon abundance at the Little Susitna River fluctuates widely. Inriver runs (escapement plus sport harvest) ranged from approximately 12,000 to 67,000 fish from 1996 to 2012 (Tables 43 and 44), years after the stocking program ended and for which complete escapement counts are available. Average inriver exploitation has varied diametrically with escapement over the same time period and averaged 46% (Figure 26).

Fishery Management and Objectives

Currently the bag and possession limits are 2 coho salmon 16 inches or more in total length per day and in possession. Only unbaited, artificial lures are allowed in the Little Susitna River from 1 October through 5 August. This regulation was originally designed to reduce the catch rate of early arriving nonhatchery fish and now remains in effect to reduce hook-and-release mortality of ocean-fresh coho salmon entering the lower river during the first quarter of the run. Hook-and-release mortality of coho salmon caught within the estuary using bait was found to approximate 70% (Vincent-Lang et al. 1993) in a 1993 study designed to simulate fishing practices at the time. Today, in addition to a delay in bait use until later in the season, 2 other measures have been adopted to help reduce hook-and-release mortality: 1) anglers are required to quit fishing when they reach their bag limit of Little Susitna River coho salmon, and 2) coho salmon intended for release cannot be removed from the water.

Coho salmon runs on the Little Susitna River have been found to be significantly correlated to those of other Knik Arm streams (Tom Namtvedt [retired] and Richard Yanusz, Division of Sport Fish Biologists, Palmer, Alaska, personal communication). The weir at its present location at RM 32.5 provides timely data to manage the sport fishery.

Fishery Performance and Escapement in 2013

During 2013, harvest rates monitored at the exit booth on the Little Susitna River were near or above the historical average for the duration of the season. There was a reported harvest of 5,229

coho salmon from the Little Susitna River in 2013, which was below the 2008–2012 average of 7,315 fish (Table 43). On the Little Susitna River, water flows were favorable in 2013 for weir operations and fish passage through the weir throughout the first 75% of the historical run. The lower end of the SEG (10,100 fish) was achieved on 16 August. The weir was mostly inoperable after 21 August due to high water, and therefore the last quarter of the historical run was underrepresented; at the time the weir became flooded, the cumulative count was about 13,000 coho salmon. The final weir count of 13,583 was incomplete and considered a minimum count (Table 44). If a quarter of the run was missed, the upper end of the SEG goal range (17,700 fish) may have been met and would have been known if the weir had remained operational.

KNIK ARM MANAGEMENT UNIT: OTHER COHO SALMON FISHERIES

Fishery Description

The Knik Arm Management Unit (Figures 1 and 15) presently supports 5 significant sport fisheries for coho salmon in addition to the Little Susitna River: Fish Creek, Cottonwood Creek, Wasilla Creek, Jim Creek, and Eklutna Tailrace. This unit also has a personal use dip net fishery on Fish Creek and 3 educational permit fisheries (Knik Tribal Council, Eklutna Village, and Big Lake Cultural Outreach).

Until 2006, the Little Susitna River was the largest Knik Arm sport fishery in terms of both participation and coho salmon harvest (Table 43). Jim Creek harvest rates were higher than Little Susitna River harvest rates during 2006–2009 and 2011–2012, but effort (angler-days) was slightly less (Table 43). Jim Creek enters the glacial Knik River about 10 river miles from salt water. Most sport fishing occurs at the confluence of Jim Creek and the Knik River, an area locally known as the Jim Creek Flats. Fishing effort and harvest rates in the Jim Creek Flats area are strongly influenced by the Knik River because its glacial waters can inundate the entire area. Powered and nonpowered boats can access upstream reaches of Jim Creek.

Coho salmon return to Knik Arm fisheries from late July through August. Spawning occurs from late September through mid-October.

Stocking Program

The sport fishery at the Eklutna Power Plant tailrace (Figure 18) was originally supported by coho salmon returning to the Cook Inlet Aquaculture Association's (CIAA) hatchery located at the head of the tailrace. The nonprofit Eklutna Hatchery operated from 1981 to 1998. Presently, fish reared at the ADF&G William Jack Hernandez Sport Fish Hatchery support the fishery, which is confined to the 0.5-mile-long tailrace and all waters within a half-mile radius of its confluence with the Knik River. Sport anglers harvest stocked coho salmon and a few wild sockeye and chum salmon in the tailrace during the coho salmon run. Salmon of Knik River and Matanuska River drainage origin are also harvested at the confluence of the tailrace and the Knik River. Current objectives of the Eklutna stocking program are to stock 120,000 thermally-marked coho salmon annually to produce a return of 7,500 adult coho salmon and generate 6,000 angler-days of effort.

Coho salmon have been stocked periodically into other KAMU systems. Stocking of Fish and Cottonwood creeks was initiated during the late 1970s. and at Jim and Wasilla creeks in the late 1980s (Whitmore et al. 1994-1996; Whitmore and Sweet 1997-1999; Rutz and Sweet 2000; Sweet and Rutz 2001; Sweet et al. 2003, 2004). The contribution of hatchery fish to the catch and harvest in the sport fisheries was not evaluated.

Historical Harvest and Escapement

From 1987 to 1998, Knik Arm stocks were harvested by a set gillnet commercial fishery that operated near the mouth of Fish Creek. Coho salmon harvests averaged 2,900 fish annually during this period (Whitmore et al. 1996; Whitmore and Sweet 1997-1999). BOF action closed the Knik Arm commercial set gillnet fishery beginning in 1999 to allow higher coho and sockeye salmon escapements into Knik Arm streams. The total annual harvest for the 6 sport fisheries (Fish, Cottonwood, Wasilla, and Jim creeks, Little Susitna River, and Eklutna Tailrace) averaged 21,166 coho salmon from 2008 to 2012 (calculated from Table 43). Jim Creek had the highest average harvest during this time (8,510 coho salmon), whereas the 3 weekend-only fisheries averaged 715 fish (Fish Creek), 669 fish (Cottonwood Creek), and 1,107 fish (Wasilla Creek) (Table 43).

Escapement index surveys have been conducted on 4 Knik Arm streams: Cottonwood, Wasilla, Jim, and Yellow creeks (Tables 44 and 45). Coho salmon escapement on Fish Creek has been monitored historically by weir, except during 1994–1996, 2004–2008, and 2011, when the weir was removed prior to 15 August before the majority of the run. In cooperation with the USFWS, 6 weeks were added to weir monitoring (after 15 August) for 2009–2013 to encompass the majority of the coho salmon run for Fish Creek (Table 44).

Fishery Management and Objectives

Fish, Cottonwood, and Wasilla creeks (Figure 15) are restricted primarily to intertidal fisheries and have been open to salmon fishing on weekends only (Saturday and Sunday) since 1971 because harvestable surpluses cannot normally accommodate continuous daily exploitation. Time restrictions were added in February 1999 after poor runs in these creeks during 1997 and 1999 (Appendix B3). Motorboats are not permitted on Wasilla Creek during weekends from July 15 through August 15.

Historical escapement data are available for Fish, Cottonwood, and Wasilla creeks from weirs operated on each creek from about 20 July through 25 September and foot index counts conducted annually on Cottonwood and Wasilla creeks. Escapement indices for Jim Creek are obtained from foot surveys that are conducted on McRoberts Creek, a tributary of Jim Creek, and upper Jim Creek; the counts are summed to provide a total Jim Creek escapement index. However, only the McRoberts Creek counts are used in the escapement goal. Biological escapement goals set in 1994 were reevaluated in 2002 and SEGs were established for Fish, Cottonwood, and Jim creeks (Tables 44–45). The BEG for Wasilla Creek was eliminated in 2002 because of a lack of historical escapement data. The Jim Creek SEG was based on historical escapement index counts, and the Fish Creek and Cottonwood Creek goals were based on average coho salmon weir counts. Wasilla Creek and Fish Creek weirs were discontinued after 2003, and Cottonwood Creek weir was discontinued after 2004. Therefore, the Cottonwood and Fish creek SEGs were subsequently dropped. Only 1 SEG of 450–1,400 fish on the Jim Creek drainage (McRoberts Creek) remains (Table 45). The management objective for these 4 systems is to achieve the escapement goal while providing a maximum level of sustained coho salmon fishing opportunity.

Coho salmon weir counts on Wasilla, Cottonwood, and Fish creeks and the Little Susitna River have been found to be significantly correlated (Tom Namtvedt [retired] and Richard Yanusz, Division of Sport Fish Biologists, Palmer, Alaska, personal communication). Fish Creek weir counts are used for inseason management of Fish Creek as well as Wasilla and Cottonwood

creeks, where weirs are not currently operated. The Little Susitna River weir, located at RM 32.5, is a useful tool for timely inseason management of the coho salmon fishery.

The BOF reduced the bag and possession limits for all Knik Arm fisheries in 2000, excluding the stocked coho salmon fishery at the Eklutna Tailrace, to 2 coho salmon 16 inches or more in total length in response to poor runs occurring in 1997 and 1999 (Appendix B3). Jim Lake, McRoberts Creek, and upper Jim Creek, tributaries supporting large spawning populations in the Jim Creek drainage, were closed to salmon fishing in 2000; Mud and Leaf lakes of the Jim Creek system joined the list of closed waters in 2014.

Between 2002 and 2009, effort and harvest more than doubled from previously on Jim Creek (Table 43). Managers are cautiously monitoring this system for any signs of overharvest. In an effort to reduce harvest closer to historical levels, in 2014, the BOF reduced fishing time on Jim Creek by allowing sport fishing to occur on Wednesdays through Sundays only, beginning the second Saturday in August.

Fishery Performance and Escapement in 2013

Total sport harvest of coho salmon in Knik Arm streams (excluding the Little Susitna River) was 7,063 fish in 2013; the 2008–2012 average was 15,446 fish (calculated from Table 43). Coho salmon runs to the Knik Arm were above average in 2013. Fishing success at Jim Creek during August was reported by anglers to be consistently good. Fishing success on the weekend only fisheries of Cottonwood, Fish, and Wasilla creeks was slow early in the season, becoming good to excellent later in August. The Eklutna Tailrace harvest of 1,521 fish was below the 2008–2012 average harvest of 2,799 fish.

Index survey counts of escapement varied by fishery (Tables 44–45). Routine staff boat surveys of upper Jim Creek and Leaf Lake provided confidence that the SEG for that system would be achieved. The Fish Creek SEG of 1,200–4,400 coho salmon was met on 7 August, approximately 20% of the way through the historical run. An EO was issued on 13 August, liberalizing Fish, Cottonwood, and Wasilla creeks to add Mondays and increasing the bag limit of coho salmon to 3 per day. The final weir count on Fish Creek was 7,593 coho salmon (Table 44). The count was considered incomplete because the weir became inundated by high water beginning 5 August at the 75th percentile of the historical run and never recovered.

A foot index survey of McRoberts Creek (Jim Creek system) of 663 fish was below historical averages, but near the high end of the SEG of 450–700 coho salmon (Table 45). The McRoberts Creek SEG had been missed over the prior 3 consecutive years (Figure 27). An index count of 1,618 coho salmon at Cottonwood Creek was above the long-term (1981–2012) average of 534 fish and a count of 422 fish on Wasilla Creek was narrowly above an average of 387 fish for the same time period. The third annual youth-only fishery on Fish Creek occurred the first weekend in August. Fishing success was reported as fair to good.

Harvest of coho in Jim Creek, Cottonwood Creek, and the Eklutna Tailrace was 3,258, 297, and 1,521 fish, respectively; all 3 harvests were below the 2008–2012 average (Table 43).

EASTSIDE SUSITNA AND WESTSIDE SUSITNA MANAGEMENT UNITS COHO SALMON FISHERIES

Fishery Description

A description of these management units, including access, is presented in the Chinook salmon section of this report. The Susitna River drainage supports the largest coho salmon stock within the NCIMA and the entire Upper Cook Inlet area. Coho salmon returning to the Susitna River units are early-run stocks that begin to enter these drainages about mid-July. The migration into the Yentna River drainage (RM 28 of the Susitna River, WSMU) normally peaks the last week in July, whereas the peak passage into the Talkeetna River (RM 98 of the Susitna River, Eastside Susitna Management Unit) takes place 7 to 10 days later. Few coho salmon enter the Susitna River after early September. Most spawning occurs between mid-September and mid-October.

All ESMU tributaries provide fishing opportunities for coho salmon. The Deshka River and Lake Creek are the major Westside Susitna Management Unit coho salmon fisheries. Fish Lakes Creek and the Talachulitna River provide modest harvests, whereas the Alexander Creek fishery has diminished over the past decade, possibly a result of northern pike predation on juvenile coho salmon.

Historical Harvest and Escapement

Coho salmon harvests averaged 14,101 fish in the ESMU and 13,550 fish in the WSMU from 2008 to 2012 (Table 42). The contribution from the ESMU and WSMU to the total NCIMA coho salmon harvest during 2008–2012 was 24% and 23%, respectively.

From 2008 to 2012, Talkeetna River, Montana Creek, and Willow Creek produced the largest coho salmon harvests in the ESMU, averaging 2,830, 2,616, and 2,390 fish, respectively, and accounting for approximately 54% of the Eastside Susitna harvest (Table 46). In the WSMU during the period, coho salmon harvest averaged 3,850 fish from Lake Creek, 3,363 fish from the Deshka River, and 3,188 fish from the Yentna River (Table 47).

Side-scan sonar and fish wheels have been used to estimate coho salmon abundance in the Yentna River from 1981 to 2008 (Westerman and Willette 2010). The Yentna River sonar program was designed to estimate sockeye salmon escapement utilizing sonar counters and fish wheels on opposite banks. Coho salmon were also counted, though factors such as the offshore distribution of upstream migrating coho salmon affect the accuracy of the counts. Estimates of coho salmon were considered index counts only (Tarbox et al. 1983; Davis and King 1997).

Abundance in a portion of the mainstem Susitna River upstream of RM 80 was estimated during the early 1980s. From 1981 to 1983, average coho salmon abundance was an estimated 47,000 fish in the Susitna River excluding all systems below RM 80. It is important to recognize that significant coho salmon runs occur in tributaries of the Susitna River downstream of RM 80 (Merizon et al. 2010). Coho salmon abundances in the Deshka River, Alexander Creek, Willow Creek, and many other important coho salmon systems were not measured during the 1981–1983 studies.

More recently, coho salmon distribution and abundance were estimated on the Susitna River drainage from 2009 to 2013, primarily using fish wheels and radio telemetry (Table 25). In 2009 and 2013, spawning distribution was assessed, and in other years, abundance was estimated only for the Susitna River mainstem. In general, coho salmon exhibited bank orientation at the tagging

site early in their migration up the Susitna River and appeared to utilize primarily tributary locations for spawning. Estimated abundance of coho salmon on the Susitna River drainage ranged from 191,000 fish in 2012 to 219,000 fish in 2010. The Yenta River abundance composed an average of about 50% of the drainagewide estimate for 2010–2012 (Table 25).

Coho salmon have been counted through a weir on the Deshka River since 1995. The weir was operated at RM 17 from 1995 to 1996 and at RM 7 from 1997 to present. During 1996, the weir was operational only through 30 July, after which high water made counting fish impossible. Incomplete counts were also recorded in 1998–1999 and 2002, 2006, and 2001–2013 due to high water events (Ivey 2014). Estimating escapement during incomplete count years is nearly impossible because run timing for Deshka River coho salmon is highly variable (Ivey 2014). Average escapement from 2003 to 2012 at RM 7, including the complete count years of 2003–2005 and 2007–2010, was 28,645 coho salmon (Table 48). A peak escapement of 62,940 coho salmon occurred in 2004. The weir continues to be operated at this site annually.

Fishery Management and Objectives

Coho salmon sport fishing is permitted throughout the year at most sites in the ESMU and WSMU. However, portions of several ESMU fisheries are closed to salmon fishing to protect spawning fish. Closed areas usually include upper reaches of tributaries that are road-accessible.

Flowing waters of major tributaries or portions of tributaries within the Susitna River drainage are restricted to unbaited, single-hook artificial lures throughout the year. These regulations are implemented as part of special management regulations for rainbow trout under the statewide management standards for wild trout (5 AAC 75.220), and in part under current Chinook salmon management strategies (Appendix C1). Only unbaited artificial lures may be used from 1 September through 15 May in all flowing waters of the Susitna River drainage. Additionally, except in the Deshka River, bait is prohibited from 15 May through 13 July in waters open to Chinook salmon fishing. Exceptions have been made for fishing burbot (*Lota lota*) when legal burbot fishing gear is used.

The BOF reduced the bag and possession limits for all Susitna River fisheries in 2000 to 2 coho salmon 16 inches or more in total length in response to poor runs occurring in 1997 and 1999 (Appendix B3). Runs to the Susitna River rebounded in 2000 resulting in a relaxation of restrictions in following years. Bag and possession limits were increased in the WSMU at the January 2005 BOF meeting to 3 fish 16 inches or more in total length and 6 in possession, except in Alexander Creek where the 2 fish bag and possession limits were retained. The bag and possession limits were increased to 3 per day and in possession in the Talkeetna, Chulitna, and upper Susitna River areas (Units 3, 5, and 6) during the 2011 BOF meeting. The bag and possession limits for coho salmon remains at 2 fish along Parks Highway streams of Unit 2 within the ESMU.

Besides the Deshka River weir where actual escapement is counted, 4 other small streams are indexed on an annual basis: Rabideux, Birch, Question, and Answer creeks (Table 48). There are no SEGs within the ESMU and WSMU. The sport fishery is currently managed under conservative regulations meant to ensure sustainable harvest over the long term because inriver exploitation is relatively low.

Ongoing abundance estimates of coho salmon in the Susitna River drainage should help determine if Deshka River weir counts provide a reliable index of run strength to the Susitna River drainage.

Sport Fishery Performance and Escapement in 2013

Fishing success along Eastside Susitna streams was mostly good through August, providing consistent fishing opportunity. Fishing success on the Deshka River peaked in mid-August. Fishing on the Talkeetna River became good by about 20 August. Within the ESMU, the most favorable fishing was reported at the mouths of the Kashwitna River and Clear Creek. Fishing success on Yentna River tributaries was reported to be good to excellent by anglers.

The 2013 sport fishing coho salmon harvest was an estimated 13,277 fish from the ESMU and 13,042 fish from the WSMU (Tables 46 and 47), which are slightly below the 2008–2012 averages.

On the Deshka River, the majority of the run passed through the weir over a 15-day period beginning 9 August, with the peak daily count of 8,119 coho salmon occurring on 12 August. Over half the escapement passed through the weir during the first week in August. The weir count was considered incomplete because the weir was flooded on 23 August, about 85% through the historical run, and never fully recovered throughout the rest of the season. Escapement index counts for ESMU and WSMU streams were 443 and 22,468 fish, respectively (Table 48). The final minimum weir count on the Deshka River of 22,341 fish was about average (Table 48); however, it is likely the count would have been above average had the weir remained functional to completely count the remainder of the run. Birch and Answer creeks had below average escapement counts of 159 and 19 fish, whereas Question Creek was above the 2008–2012 average of 98 fish with an escapement index of 265 fish (Table 48).

WEST COOK INLET MANAGEMENT UNIT COHO SALMON FISHERIES

Fishery Description

A description of this management unit, including access, is presented in the Chinook salmon section of this report. Little information is available regarding run timing of WCIMU coho salmon. However, it is assumed to be similar to that of the Susitna River. The Chuitna and Theodore rivers provide the major fisheries north of the West Foreland, and the Kustatan River and tributaries of Big River Lakes provide the major fishery sites south of the West Foreland. Harvest levels on Big River Lakes' tributaries surpassed those of Chuitna River every year since 2003. Currently this fishery mirrors the Kustatan River in size.

Historical Harvest and Escapement

Coho salmon harvests averaged 9,522 fish in the WCIMU from 2008 to 2012 (Table 42). The unit's contribution to the total NCIMA was 16% during this period. The Kustatan River is the primary producer of coho salmon in the management unit. Average harvest in this stream from 2008 to 2012 was an estimated 2,670 fish (Table 49). The second and third major coho salmon producers are tributaries of Big River Lakes, with a 2008–2012 sport harvest average of 2,625 fish, and other streams south of the Northern Foreland, with an average of 760 coho salmon harvested during the same period (Table 49).

In 2013, 2 coho salmon weirs operated for 1 season on the Theodore and Lewis rivers. A total of 1,560 coho salmon were counted on the Theodore River between 20 July and 31 August. On the

Lewis River, 413 coho salmon were counted between 30 July and 31 August (Nicholas Logelin, Fishery Biologist, ADF&G Sport Fish Biologist, Palmer, personal communication).

Fishery Management and Objectives

The Regulatory history of the WCIMU is found in Appendix B3. In the WCIMU, all flowing waters are closed to salmon fishing from 1 October to 31 December. The bag and possession limits for coho salmon are 3 per day and 6 in possession. There are no coho salmon goals in the WCIMU.

Sport Fishery Performance and Escapement in 2013

The 2013 sport harvest of coho salmon from WCIMU was an estimated 7,698 fish (Table 42), below the 2008–2012 average of 9,522. The largest harvest of coho salmon came from the Kustatan River, with an estimated harvest of 2,550 fish, which was below the 2008–2012 average of 2,670 fish (Table 49). The tributaries of Big River Lakes had a harvest of 2,293 fish, which was below the average of 2,625 fish for 2008–2012 (Table 49).

Coho salmon fishing was reported as good by anglers across tributaries of the WCIMU. Reports of good fishing came from the Big River Lakes, Kustatan and Chuitna rivers, and small tributaries of the Beluga River.

SOCKEYE SALMON FISHERIES

FISHERY DESCRIPTION

The Yentna River is thought to support about 77% of the Susitna River sockeye salmon escapement (Fair et al. 2009). The sport fishery for sockeye salmon in NCIMA drainages is mostly incidental to harvest of other salmon. Big River lakes, a major sockeye salmon sport fishery in the WCIMU, has grown over recent years and is currently the largest fishery in the NCIMA. The majority of the harvest in this fly-fishing-only fishery occurs at the mouth of Wolverine Creek, which drains into Big River lakes. Other directed sockeye salmon fisheries occur in the Susitna River drainage at Larson Creek (Talkeetna River drainage) in the ESMU, Lake Creek and the Talachulitna River in the WSMU, the mouth of Nancy Lake Creek (Little Susitna River drainage), and at Jim Creek in the KAMU. Any surpluses of sockeye salmon above escapement needs at Fish Creek of the KAMU are targeted by a personal use fishery (see Personal use and Subsistence Fisheries section).

STOCKING PROGRAM

Due to declining abundance of sockeye salmon during the early 1970s, stocking of Fish Creek with sockeye salmon was initiated in 1975. See Personal Use and Subsistence Fisheries section for further information.

HISTORICAL HARVEST AND ESCAPEMENT

Sport harvests of sockeye salmon in the NCIMA ranged from 3,140 to 23,235 fish during 1977–2012 and averaged 13,821 fish (Table 50). Within the NCIMA, the KAMU and ESMU historically accounted for the majority of the harvest of sockeye salmon. The WCIMU, with fewer accessible streams, placed last in average harvest until about 1993 when the sport fishery at Wolverine Creek (Big River lakes) began to grow; most recently, harvest has been greatest for sockeye salmon in the WCIMU (Figure 28). The Knik River dominates KAMU harvests (Table

51), whereas ESMU harvests are predominately from the Talkeetna River, specifically Larson Creek (Table 52). Lake Creek is the largest fishery in the WSMU (Table 53), and the WCIMU harvest is predominately from Wolverine Creek (Big River Lakes; Table 54). Wolverine Creek, located in Redoubt Bay Critical Habitat Area, has developed into a popular sockeye salmon fly-fishing and bear viewing area since the early 1980s.

Sockeye salmon populations are present in numerous streams throughout the KAMU, some of which were surveyed sporadically in the past (Tables 55–56). Bodenbug Creek, a Knik River tributary, was surveyed annually from 1968 to 2013, except for 1984 and 1988 (Table 57).

The escapement of sockeye salmon into the Fish Creek drainage has been extensively documented. Escapement of these late-run sockeye salmon ranged from 2,705 fish in 1973 to 307,000 fish in 1940 (Kyle and Chlupach 1990). From 1969 to 2012, escapement of sockeye salmon ranged from 2,705 fish in 1973 to 192,352 fish in 1984 and averaged about 53,000 fish (Table 55).

Escapement of sockeye salmon to the Yentna River drainage was documented annually from 1981 to 2008 by the Division of Commercial Fisheries and at various times by CIAA operating weirs at Chelatna Lake (Lake Creek drainage), Judd Lake (Talachulitna River drainage), Larson Lake (Talkeetna River drainage), Shell Lake, and Hewitt Lake (Tables 55–56). Within the NCIMA, the Division of Commercial Fisheries has also operated a weir at Packers Creek on Kalgin Island. A major effort to better understand the dynamics surrounding sockeye salmon production in the Susitna River was conducted from 2006 to 2008 by SF. Abundance estimates were generated using a combination of fish wheels and weirs, and the distribution of spawners was assessed. The abundance of mainstem Susitna River sockeye salmon was estimated at 107,000 fish in 2006 (Table 25) using PIT tags deployed at a site called “Flathorn” and recovered at a site called “Sunshine” (Yanusz et al. 2007). Neither the estimate based on PIT tags nor the estimates based on radio tags met conditions for a reliable capture–recapture experiment for the Yentna River during 2006. Sockeye salmon abundance estimates for the mainstem Susitna River were 87,883 in 2007 and 70,552 in 2008. In the Yentna River, estimates were 239,849 in 2007 and 288,988 in 2008, based on radio tags (Table 25; Fair et al. 2009).

CIAA operated a weir on Wolverine Creek from 1981 to 1983 (Table 56). Increased harvest and use of the area prompted managers to investigate the escapement of sockeye salmon into Wolverine Creek beginning in 2004. A remote camera station was set up on Wolverine Creek in mid-June 2004. Technical problems resulted in incomplete counts 2004–2006 (Table 56).

FISHERY MANAGEMENT AND OBJECTIVES

Regulations for sockeye salmon sport fisheries of the NCIMA follow general regulations for other salmon over 16 inches in total length. The bag and possession limits on WSMU and WCIMU tributaries is 3 per day and 6 in possession; ESMU and KAMU tributaries are 3 per day and 3 in possession. Wolverine Creek within a 500-yard radius of its mouth is managed as the area’s only fly-fishing-only waters during 1 June–31 July.

The management objective for sockeye salmon in the NCIMA sport fisheries is to attain established escapement goals as measured at various weirs and a sonar site while harvesting fish in excess of these escapement goals. The SEG for Fish Creek is 20,000–70,000 sockeye salmon counted through a weir. Yentna River sockeye salmon were estimated by side scan sonar located at RM 4 of the Yentna River through 2008 and evaluated against an SEG of 90,000–160,000

fish. Under the Northern District Salmon Management Plan, when runs were greater than 4,000,000 sockeye salmon to the Kenai River, an OEG of 75,000–180,000 fish became the escapement goal. The Yentna SEG and OEG were discontinued after 2008 and replaced with 3 weir-based SEGs: Chelatna Lake (SEG 20,000–65,000), Judd Lake (SEG 25,000–55,000), and Larson Lake (15,000–50,000).

From 2004 to 2007, sockeye salmon sport fisheries occurring on the Susitna River were restricted through various emergency orders prohibiting retention. The EOs were based on low inseason escapement estimates generated at the Yentna River sonar and additionally in 2006, on a low preseason projection of 190,000 sockeye salmon returning to the Susitna River.

A project to estimate abundance and spawning distribution on the Susitna River drainage was conducted from 2006 to 2008 (Table 25). Part of this project was directed at establishment of a genetic baseline for Susitna River sockeye salmon. Microsatellite and single nucleotide polymorphism (SNPs) technology were used to further ADF&G's understanding of stock identification and the exploitation of sockeye salmon of Susitna River origin among various fisheries. Proportions and numbers of Susitna-origin sockeye salmon harvested in these fisheries from 2005 to 2009 may be found in Barclay et al. (2010b).

Following guidelines set forth in the *Policy for Management of Sustainable Salmon Fisheries Policy* for the State of Alaska⁶, the BOF designated Susitna River sockeye salmon a stock of yield concern in 2008 based on a failure to achieve the Yentna River SEG in 5 of the previous 8 years (Table 56) and lower-than-expected yields⁷. An action plan ensued, directing management of the Central District drift gillnet fishery to continue under restrictive guidelines set forth in the plan, and a restrictive measure within the *Northern District Salmon Management Plan* was implemented that limits fishing to one-third of the normally allotted gear (1 set gillnet not more than 35 fathoms in length) from 20 July to 7 August. In late 2008, a sockeye salmon escapement goal review was conducted out of the BOF cycle (Fair et al. 2009) to address uncertainty in estimating Yentna River sockeye salmon escapements using Bendix sonar. This review determined that the sonar-based SEG should be abandoned and replaced with 3 weir-based SEGs. Inseason management of the sport fisheries has not taken place since implementation of the aforementioned action plan. The action plan states that sport harvest will not be used to determine escapements or in developing escapement goals. Further, the Susitna River sport fisheries will remain open with a 3 fish bag limit unless directed otherwise by the BOF and any harvest restrictions will be realized in the commercial fisheries, in most cases. Weir counts at Judd, Chelatna, and Larson lakes are to be used for postseason evaluation of run size.

At a 2011 meeting, the BOF amended the *Central District Drift Gillnet Fishery Management Plan*. The purpose of this plan is to ensure adequate escapement of salmon into the Northern District drainages and to provide management guidelines to ADF&G (Appendix C1). The intent of the amendment was to pass more sockeye salmon to the Northern District through the first half of July and allow coho salmon passage during the latter half of July.

SPORT FISHERY PERFORMANCE AND ESCAPEMENT IN 2013

In 2013, fishing success varied across the NCIMA. Anglers fishing KAMU streams reported poor sockeye salmon catches, whereas those fishing Susitna River stocks reported that catches

⁶ 5 AAC 39.222

⁷ Susitna Sockeye Salmon Action Plan

were fair. The total sockeye salmon harvest across the NCIMA in 2013 was 17,112 fish, which was above the 2008–2012 average harvest of 16,010 fish (Table 50). Larson Creek (Talkeetna River tributary) produced an above average harvest of 3,527 fish (Table 52). A harvest of 3,739 fish at Lake Creek of the WSMU was also above the 2008–2012 average (Table 53), whereas a harvest of 4,025 fish at Wolverine Creek (Big River Lakes) in the WCIMU was about average (Table 54). In the KAMU, harvest on the Little Susitna River dropped to 271 fish, well below its 5-year average of 982 fish (Table 51), and the sockeye salmon fishery at Jim Creek (Knik River tributary) produced 1,596 fish, which was below its 2008–2012 average of 2,488 fish. Although no directed sport fishery occurs at Fish Creek for sockeye salmon, 18,912 sockeye salmon were counted through the weir, which was below the SEG range of 20,000–70,000 fish (Table 55); the personal use fishery was not opened (see Personal Use Fisheries section). In 2013, the SEGs at Chelatna Lake and Larson Lakes both were met (Tables 55–56 and Figure 29). The SEG at Judd Lake of 25,000–55,000 fish was missed with a count of 14,021 fish.

A foot survey of Bodenbug Creek revealed a count of 491 sockeye salmon, which was above the 2008–2012 average of 451 fish (Table 57).

RAINBOW TROUT FISHERIES

FISHERY DESCRIPTION

The majority of wild rainbow trout angling occurs in the Knik Arm and Eastside Susitna Management Units. Wild rainbow trout fisheries of the ESMU extend from Willow Creek north along the Susitna River as far as Portage Creek, and include Talkeetna River and the relatively smaller tributaries of the Chulitna River and East Fork Chulitna River. Most tributaries of the ESMU are cold water streams originating in the Talkeetna Mountains. Access is primarily via the George Parks Highway and by jet boat. The WSMU includes tributaries of the Yentna River and all streams entering the Susitna River from the west (Figure 30). Westside tributaries are a mix of streams either originating out of lake systems or from the Alaska Range. Access to these fisheries is by raft, power boat, or airplane. Because of the shallow nature of many of the westside streams, drop-off float trips are common. Many lodges accommodate anglers fishing the WSMU.

HISTORICAL HARVEST

Rainbow trout are a highly sought-after sport fish within the NCIMA. To ensure sustained yield, various research projects have been conducted. Assessment of migration and the age and length characteristics of rainbow trout stocks were the primary focus of several investigations, including studies on rainbow trout stocks of the Deshka River, Lake Creek, and Talachulitna River in 1989 and 1990 (Bradley 1990, 1991), the Kashwitna River in 1991, Peters Creek in 1992 (Rutz 1992, 1993), and the North Fork Kashwitna in 1996. Onsite creel surveys were also conducted at Lake Creek during 1988 (Vincent-Lang and Hepler 1989) and 1989 (Bradley 1990).

There were significant differences in age composition and average length-at-age among Susitna River tributaries sampled during 1989–1992 (Rutz 1992, 1993). Rainbow trout tagged during 1991 and 1992 indicated low numbers of trout over 510 mm in total length, which is the size limit for trophy trout defined in the *Criteria for Establishing Special Management for Trout*. This lack of adequately-sized fish, combined with the relatively slow growth rate of Susitna River basin trout in comparison to other Alaska waters containing trophy trout, suggests that

these Susitna River rainbow trout stocks are not viable candidates for management as trophy fisheries (Rutz 1999).

Northern pike investigations conducted in the mid-1990s revealed the potential for a reduction of Susitna River drainage rainbow trout stocks as a direct result of northern pike colonization and proliferation throughout the area. Several lake and river populations of rainbow trout in the WSMU have been severely impacted by northern pike predation (Rutz 1999).

NCIMA rainbow trout harvests ranged from 9,198 to 74,962 fish and averaged 33,149 fish from 1977 to 2012, accounting for 39% of the average harvest in Southcentral Alaska (Region II) and 27% in the state (Table 58). From 1990 (when estimates of catch became available) through 2012, the average catch of rainbow trout in the NCIMA was 85,805 fish (Table 58).

Rainbow trout harvested from KAMU during this time period accounted for approximately 73% of the total NCIMA harvest (calculated from Table 58). The KAMU also dominates the catch, the majority of which is from stocked lakes. A large percentage of catch and harvest is a result of the stocked lakes program.

The WSMU accounted for 13% of the NCIMA harvest and the ESMU accounted for 12% from 1977 to 2012. The WCIMU made up 1% of the NCIMA harvest from 1977 to 2012 (Table 58).

In the ESMU, Willow and Montana creeks produced the largest rainbow trout harvests until 1997, when the BOF designated the creeks as catch-and-release fisheries for rainbow trout and Arctic grayling (Table 59). From 2008 to 2012, these 2 creeks averaged a greater catch than others monitored in the ESMU (Table 60). The Deshka River and Lake Creek generally provide the largest harvests of rainbow trout among WSMU fisheries (Table 61), whereas Lake Creek and Talachulitna River usually produce the largest catches (Table 62). In general, a comparison of long- and short-term averages among Susitna River tributaries shows a noticeable drop in rainbow trout harvest and an increase in catch. Increased catch rates indicate growing fisheries on the Susitna River.

FISHERY MANAGEMENT AND OBJECTIVES

Management of wild rainbow trout in the NCIMA has undergone numerous changes (Appendix C1). A statewide management plan (5 ACC 75.220) and policy (5 ACC 75.222) for the management of sustainable wild trout fisheries was adopted by the BOF in March 2003 as a means of uniformly managing wild trout stocks across Alaska. The goal of the policy is to protect the largely intact wild trout populations unique to Alaska by conservatively managing for optimal sustained yield. Under the optimal sustained yield concept, fishery benefits including quality of experience, diversity of opportunity, conservative consumptive harvest opportunity, and economic benefits are considered while maintaining healthy stock status (e.g., biologically desirable size compositions and abundance levels) and genetic diversity. Conservative management of wild trout in the NCIMA follows these standards: a bag and possession limit of 2 trout, of which only 1 may be over 20 inches in total length, with an annual limit of 2 trout over 20 inches in total length. Beginning in 1987, prior to the development of statewide management standards, wild rainbow trout fisheries of NCIMA were managed under the conservative yield concept, aimed at maintaining historical size and age compositions and abundance.

In addition, many tributaries or sections of tributaries in the NCIMA are designated as rainbow trout special management waters, either as trophy rainbow trout waters or as catch-and-release-only waters. A major portion of the ESMU, from the junction of the Susitna and Talkeetna rivers

upstream to Devils Canyon, has been managed for trophy-size trout (trout over 20 inches) since 1987. Under this strategy, only 1 trout 20 inches or more in total length is allowed daily with a seasonal limit of 2 trout over 20 inches. All trout less than 20 inches must be released immediately. An unbaited, single-hook lure requirement complements this strategy.

Catch-and-release rainbow trout fisheries include the Talachulitna River, most of the Lake Creek drainage, much of the Deshka River, the Fish Creek drainage located within the Talkeetna River drainage, the North Fork of the Kashwitna River, and Willow and Montana creeks. Unbaited, single-hook lures are mandatory in all catch-and-release waters. Catch-and-release strategies perpetuate quality fishing rather than protect or rebuild depressed stocks (Engel and Vincent-Lang, *Unpublished*).

Wild trout fisheries are not supplemented with hatchery trout in the Susitna River drainage. Past public testimony has suggested little interest in the use of hatchery fish to augment wild stocks and the current stocking policy supports the public's stance. Stocked rainbow trout are generally managed for maximum yield (see the Stocked Fisheries section above).

SPORT FISHERY PERFORMANCE IN 2013

The 2013 harvest of rainbow trout in the Knik Arm Management Unit was 9,195 fish. The 2008–2012 average harvest for this stock was 10,433 fish (Tables 63 and 64). Most of the rainbow trout harvest in the KAMU was from stocked lakes. The greatest harvest occurred in the Kepler Lake complex (2,698 fish), Finger Lake (1,665 fish), Memory Lake (321 fish), Big Lake (488 fish), and Knik Lake (343 fish) (Tables 63 and 64).

Rainbow trout catches in KAMU during 2013 were highest in the Kepler Lake complex (18,190 fish), Finger Lake (8,129 fish), Big Lake (4,033 fish), and Bonnie Lakes (2,462 fish) (Tables 65 and 66).

The total harvest in the ESMU in 2013 was 1,248 rainbow trout, which was just above the 5-year average (Table 59). The total harvest in the WSMU of 468 fish was slightly less than the 2008–2012 average of 547 rainbow trout (Table 61).

The 2013 total catch in the ESMU was 44,029 rainbow trout, which was above the previous 5-year average of 39,882 fish (Table 60). The 2013 WSMU total catch of 20,178 rainbow trout was below the 5-year average of 26,038 (Table 62).

Major Eastside Susitna River fisheries include Willow Creek, Montana Creek, and the Talkeetna River. During 2013, catches of rainbow trout on Montana Creek marked a record high of 17,636 rainbow trout. The 2008–2012 average for the Montana Creek fishery is 7,865 (Table 60). Of these 3 systems, there were no reported harvests on both Willow and Montana creeks in 2013, and 208 rainbow trout were harvested from the Talkeetna River (Table 59).

Catch from Westside Susitna River fisheries was dominated by Lake Creek. Although an estimated 9,015 rainbow trout were caught from Lake Creek during 2013, only an estimated 174 rainbow trout were harvested from Lake Creek (Tables 61 and 62). The Talachulitna River drainage, which is a catch-and-release-only fishery, produced a catch of 5,433 rainbow trout. The rainbow trout catch at Alexander Creek of 123 fish was well above the 5-year average of 15 fish. It is believed that northern pike predation is responsible for the decline in Alexander Creek rainbow trout catches since 1990.

NORTHERN PIKE FISHERIES

FISHERY DESCRIPTION

Northern pike are not indigenous to the NCIMA, although they are indigenous north of the Alaska Range. They were illegally introduced into the area during the early 1950s. Since then, northern pike have expanded their range both naturally and through subsequent illegal stockings. They have been reported in more than 100 lakes and more than a dozen tributaries of the Susitna River (Sweet and Rutz 2001). Prior to about 1992, several of these lakes consistently produced northern pike in the trophy-class range (greater than 40 inches for catch-and-release honorary certificates or 15 lb), and it was common to find fish weighing up to 20 lb and occasionally over 30 lb.

The potential for northern pike to proliferate in the Susitna River drainage is immense. Most of the habitat suitable to northern pike is found within the lower-lying WSMU. The area from the headwaters of the Deshka River (Petersville Road) across the Kahiltna River to Hewitt Lake, then down to the mouth of the Susitna River, encompasses most of the northern pike populations and habitat in the NCIMA (Figure 30). In the KAMU, most northern pike habitat exists in a triangle created by the Susitna River and Parks Highway south of Willow (Figure 15). This area includes the Nancy Lake, Big Lake, and the Little Susitna River drainages, and lakes of the Susitna Flats such as Flathorn and Figure Eight lakes. Northern pike were documented in both Big Lake and Nancy Lake in 2005. Growing or even new pike fisheries are expected in these areas as northern pike continue to colonize the NCIMA. The amount of available northern pike habitat in ESMU waters is sparse when compared to that of the WSMU or KAMU. Regardless, northern pike have been documented or reported in some of the lakes in the ESMU.

HISTORICAL HARVEST AND CATCH

In 1977, the first year estimates were available, harvest of northern pike in the NCIMA was only 132 fish, accounting for only 1% of the statewide harvest of northern pike (Table 67). Northern pike harvests slowly increased through 1983 when the harvest totaled 944 fish. Since 1984, harvest of northern pike has greatly increased, likely due to continued range expansion and increased angler interest. Interest in northern pike as a sport fish grew in the mid-1990s as concerns about their spread increased and regulations were subsequently liberalized (Appendix B4). As interest increased, harvest in the NCIMA increased sharply (Figure 31). Harvests have been over 5,000 fish in all years since 1990 except 1994 and 1995. The 2008–2012 average harvest in the NCIMA was 9,061 fish, much higher than the historical (1977–2012) average of 5,888 fish (Table 67).

Since 1990, the first year catch estimates were generated from the SWHS, the average catch of northern pike in the NCIMA has been about 3.5 times the harvest. The first northern pike catch from the ESMU and WCIMU was documented in the SWHS in 1996 and 1993, respectively (Table 67). Previously, other than anecdotal information, no information was available regarding northern pike catch or harvest from these areas. The NCIMA harvest surpassed the Arctic–Yukon–Kuskokwim area for the first time in 1997.

FISHERY MANAGEMENT AND OBJECTIVES

The management objective for this fishery is to maximize harvest opportunity. The majority of the NCIMA does not have a bag or possession limit for northern pike. Note that this is in contrast to other areas of Alaska where northern pike are indigenous and are managed conservatively.

In 1997 and 2002, the BOF liberalized harvest methods in many lakes within the NCIMA where northern pike populations were pervasive (Appendix B4) by allowing use of 5 lines while fishing through the ice. Five-line areas were further expanded at the 2008 BOF meeting with the addition of several tributaries of the Susitna River drainage that were thought to contain mostly northern pike. Additional water bodies may be added to this list as northern pike gain strongholds in new areas through continued range expansion. In 1998, the BOF adopted a slot limit regulation for Alexander and Trapper lakes to provide anglers the opportunity to catch large fish. The daily bag limits were set as follows: for northern pike less than 22 inches in total length, there was no limit; for northern pike between 22 and 30 inches, there was no retention; and for northern pike over 30 inches, the limit was 1 per day. The objective was to remove fish less than 22 inches in length from the population while protecting fish in the 22–30 inch range, allowing them a chance to attain a larger size when they would again be available for harvest. In 2002, the slot limit was repealed for Trapper Lake when it was determined that only Alexander Lake would be used to evaluate the effectiveness of a slot limit management strategy. Evaluation took place in 2008. Length frequencies were found to be similar between northern pike sampled in 1995–1996 and those sampled in 2008. The slot limit may have maintained the historical size structure, providing continued opportunity to harvest trophy-sized northern pike, whereas liberalized regulations on other popular lakes such as those shown in Figure Eight and Flathorn lakes have generally resulted in low numbers of large northern pike. Both liberalization and limits can result in angler dissatisfaction because liberal regulations tend to result in high abundance of smaller northern pike whereas a slot limit allows a harvest of mostly small northern pike (less than 22 inches). To remedy dissatisfaction with the slot limit, in 2009 the BOF met out of cycle to change the slot limit to a size limit of 27 inches. This strategy allowed unlimited harvest of northern pike less than 27 inches in total length and a daily bag limit of 1 northern pike over 27 inches in length. At the 2011 BOF meeting, the size limit was repealed and unlimited harvest of northern pike was allowed on Alexander Lake. Special provisions were added to Big and Nancy lakes to use bait from November 1–March 15 in order to target northern pike through the ice. The BOF further changed area regulations in an attempt to increase harvest by making it illegal to release northern pike back into the water alive in all waters managed in the Susitna River drainage and in the WCIMU.

Efforts are made annually to verify the suspected existence of northern pike in certain waters around NCIMA. It is suspected that northern pike have invaded Cottonwood Creek because they have been documented in Anderson Lake, which is intermittently connected to the Cottonwood Creek system. ADF&G has had anecdotal reports of northern pike in Jim Creek, but their presence has not been documented. Because the Cottonwood and Jim creeks systems have ideal northern pike habitat, salmonid populations would probably be severely affected by colonization. The Little Susitna River has limited northern pike habitat, so the negative effects to salmonid stocks there may be limited, except for sockeye salmon production that occurs in Nancy Lake. Areas that once contained healthy fish populations but that now contain mostly northern pike include Alexander Lake and all inlet streams, Fish Creek of the Nancy Lake canoe system, Fish Creek of Kroto Slough, Fish Lake Creek of the Yentna River, and Three Mile River and lakes of WCIMU.

Future management of northern pike in the NCIMA will follow guidelines and strategies outlined in the *Management Plan for Invasive Northern Pike in Alaska* (ADF&G 2007) implemented in 2005, and the *Alaska Aquatic Nuisance Species Management Plan* (Fay 2002). In 2010, a regional effort was made to prioritize northern pike waters in the Matanuska–Susitna,

Anchorage, and Kenai areas for eradication or suppression. Prioritization was based on many factors, including threat to species existence, threat to an existing fishery, the magnitude of the fishery, economic impact, cultural significance, feasibility, probability of success, and others.⁸ All waters have not been prioritized as of yet, though Alexander Creek was fully evaluated using this priority matrix and rated a number-one priority for suppression. Legislative funding was secured to initiate a full-scale gillnetting effort on side channel sloughs of Alexander Creek beginning in 2011. See Appendix A of Oslund and Ivey (2010) for a history of northern pike in the Alexander Creek drainage, impacts to anadromous and resident fish species, and past studies conducted on northern pike within this system. To date (2013 field season), 15,315 northern pike have been removed from this system as a result of suppression efforts (Dave Rutz, Sport Fishery Biologist, ADF&G, Palmer, personal communication).

SPORT FISHERY PERFORMANCE IN 2013

The estimated harvest of northern pike in the NCIMA during the 2013 season was 18,764 fish (Table 67). The 2008–2012 average harvest was 9,061 fish. The KAMU and WSMU each accounted for the majority of the harvest (9,338 and 8,168, respectively), with the remainder from the ESMU and WCIMU (Table 67). Figure 8 Lake, Flathorn Lake, and Nancy Lake complex contributed 80% of the KAMU catch in 2013 (Table 68). Alexander Creek drainage was the main contributor to northern pike catch in the WSMU (30%) throughout the same period (Table 69).

STOCKED LAKE FISHERIES

Currently 83 lakes in the NCIMA are stocked on an annual or biennial basis. These lakes range from 2 to 362 surface acres and are stocked with a variety of sizes and species of game fish including rainbow trout, coho salmon, Chinook salmon, Arctic grayling, and Arctic char.

In most cases, stocked landlocked lakes represent new fisheries because game fish were not present before stocking occurred. Stocked lakes benefit anglers and related businesses by providing diverse, year-round fishing opportunities and by diverting angling pressure from wild stocks. The majority of the stocking is directed toward road-accessible lakes that tend to draw entire family groups for some combination of fishing, camping, picnicking, boating, snow machining, and ice skating. Many lakes have additional restrictions on motor use, access, and quiet hours listed in lake management plans established by the Matanuska–Susitna Borough (Appendix J1).

HISTORICAL STOCKING PROGRAM

The stocking program began in 1952 when 2 lakes received 22,000 rainbow trout fry. Eight species of salmonids have been stocked since 1952. Steelhead trout (or rainbow trout) from the Karluk River (Kodiak) and 4 other stocks of Alaskan rainbow trout (Naknek River, Talarik Creek, Swanson River, and Big Lake), as well as rainbow trout from federal and private hatcheries located in Idaho, Montana, Oregon, and Washington have been stocked by ADF&G. Landlocked salmon fisheries have been supported by coho salmon from Washington State and at least 9 Alaskan egg-take sources, and Chinook salmon from 3 Alaskan sources. Since 1979, only indigenous Alaskan fish have been stocked in the NCIMA. Arctic grayling egg-take sources have

⁸ Region II Invasive Northern Pike Priorities. *Memorandum*. Alaska Department of Fish and Game, Division of Sport Fish, Anchorage.

been Junction Lake, Tolsona Lake, and Moose Creek. Arctic char, originating from egg takes at Aleknagik Lake, and lake trout from Paxson Lake were first stocked in 1988.

The final egg take from Big Lake rainbow trout broodstock at Fort Richardson Hatchery took place in 1993. All resulting fingerlings were stocked in Big Lake drainage lakes, and all remaining broodstock was stocked in Anchorage area landlocked lakes and in Big Lake. Swanson River rainbow trout are the sole rainbow trout broodstock source that remained at the Ft. Richardson Hatchery until its closure in 2012. Beginning in 1994, Big Lake drainage system lakes having intermittent outlets have been stocked with triploid all-female Swanson River rainbow trout.

CURRENT STOCKING PROGRAM

Rainbow trout, coho salmon, Arctic char, and Arctic grayling are now the primary species used in the stocking program. Rainbow trout composed 80% of all fish stocked in landlocked lakes within the NCIMA in 2013. Annual releases of all species during 2013 totaled 1,047,637 fish (Table 70).

The majority of rainbow trout released into NCIMA waters are fingerlings. Most fingerlings weigh 1–2 g and are released in July and August. Catchables weigh around 100 g and are stocked in nonproductive lakes to increase angling opportunities and help maintain good catch rates in heavily fished lakes. Nearly 14% of the rainbow trout stocked in the NCIMA are catchable size at introduction. Anglers expended a total of 26,810 angler-days to catch 38,874 rainbow trout in 2013 (Table 71), an increase in catch of over 16,000 rainbow trout from 2012.

Historically, Arctic grayling were stocked in early summer as subcatchables weighing up to 70 g. The first year Arctic grayling catchables were available from the new William Jack Hernandez Sport Fish Hatchery for stocking was in 2013; these fish were about 100 g at release. There were 2,189 Arctic grayling caught in stocked waters in 2013 (Table 72). Catch rates are expected to improve with the stocking of larger fish.

Coho salmon are normally stocked in May at about 3–5 g each. These fish achieve a harvestable size (6–11 in) at age 2, the year following release. Most coho salmon are either harvested or die after becoming sexually mature by age 3. Stocked coho salmon support diverse winter fishing opportunities in the NCIMA. Coho salmon were stocked in 13 lakes in 2013 at a stocking size between 5.5 and 6.6 g (Table 73).

Chinook salmon were stocked as catchables (at least 120 g) in early October, providing winter ice fishing opportunities in 2 heavily fished lakes (Table 73). Typically 4 lakes are stocked with Chinook salmon catchables; however, there was a shortage of Chinook salmon eggs from the 2012 egg take, and consequently 2 of the 4 lakes were stocked in 2013 (Table 70).

Arctic char were stocked as catchables, weighing between 110 and 143 g, in 12 lakes in June, providing more diversity for sport fishing (Table 73). Arctic char brood weighing 400 g were stocked late November in 2 lakes. On average, approximately 300 brood Arctic char are stocked annually.

STOCKING PROGRAM EVALUATIONS

Research has accompanied development of the area's stocking program since the early 1970s. The primary objective of this research has been to develop cost-effective stocking practices that provide both expanded and diverse fishing opportunities. A survey of anglers fishing stocked

lakes in the NCIMA in 1977 revealed that 70% preferred to fish for rainbow trout, 19% desired landlocked coho salmon, and 11% listed Arctic grayling as their choice (Watsjold 1978).

Lake stocking research has also been directed toward the following: evaluation and selection of rainbow trout broodstock, development of effective stocking densities and sizes of stocked fish for various lake environments, establishment of optimal time and frequency of stockings in various landlocked lake environments, evaluation of sterile coho salmon and rainbow trout for stocking lakes that have open or intermittent linkage with drainages that support wild fish, and evaluation of female diploid rainbow trout to eliminate high mortality associated with spawning males (Bentz et al. 1991). Although research indicates that the contributions from the landlocked lake stocking program have been significant to date, poor survival of stocked fish has also been documented.

Studies have also documented growth of stocked rainbow trout fingerlings released in July and August weighing 1–2 g. By June of the year following introduction, age-1 fingerlings will typically have a total length that ranges from 3 to 6 inches; at age 2, fish range from 6 to 11 inches, at age 3, from 11 to 16 inches, and at ages 4–5, they are typically above 16 inches in total length. Approximately 70% to 80% of the rainbow trout harvested from stocked lakes are age 2, and about 15% to 20% are age 3. Few stocked rainbow trout exceed age 5, and relatively few rainbow trout achieve harvestable size prior to age 2 (Havens et al. 1995).

FISHERY MANAGEMENT AND OBJECTIVES

Presently there are 3 lake management plans addressing stocking for NCIMA lakes: *Finger Lake Management Plan*, *Kepler-Bradley Complex Management Plan*, and *Matanuska-Susitna Valley Small Lakes Management Plan* (Loopstra 2013).

The primary objective of the stocking program is to provide additional fishing opportunities in a cost-effective manner on a sustainable basis by stocking lakes with game fish that are indigenous to Alaska. An additional objective is to reduce effort on the area's wild stocks and ensure that stocking does not negatively impact wild stock genetics or other fisheries. All stocking is conducted in accordance with guidelines set forth in the *Statewide Stocking Plan for Recreational Fisheries* (<http://www.adfg.alaska.gov/index.cfm?adfg=fishingsportstockinghatcheries.stockingplan>, accessed January 2017).

Stocked landlocked lakes fall under the maximum sustained yield management concept. Bag and possession limits under this management concept are 5 rainbow trout, only 1 over 20 inches, with an annual limit of 2 fish over 20 inches, except in the stocked lakes of the Knik Arm and Susitna River areas, where the annual limit is 10 rainbow trout 20 inches or longer. Although stocked lakes are primarily managed for put-and-take fisheries, 3 stocked lakes (Long Lake in the Kepler-Bradley complex, Wishbone Lake, and X Lake) have been established for catch-and-release fishing. These 3 lakes allow only unbaited, artificial lures, and are closed 1 November to 30 April.

Future management of stocked lakes has 2 main issues:

- 1) Northern pike have been illegally stocked in local lakes. An invasive species program is currently underway (see northern pike section of this report) with a goal to control or eradicate northern pike in stocked lakes and to prevent future illegal stockings. The alternative to northern pike control is to discontinue or alter stocking on a case-by-case basis. Differences in lake structure with respect to available northern pike habitat and

deep water refuges for stocked species warrant different approaches to management. For example, due to the presence of northern pike, stocking in Big and Little No Luck lakes was discontinued, and stocking has been altered and limited to fully landlocked catchable fish only in South Rolly, Prator, and Memory lakes.

- 2) The second issue is ongoing in our area. In the past 20 years, the Matanuska–Susitna (Mat–Su) Valley population has increased enormously. Subdivisions have been developed around lakes that once had no development and very little use. Now sport fishing, wildlife viewing, and jet skiing are new activities on many of these lakes. Increasing numbers of conflicts between lakefront owners and other users concerning noise and boat wakes has led to the creation of Mat–Su Borough Lake Management Plans for a number of Mat–Su Valley Lakes. These plans were developed through a public meeting process that determined prohibited activities for each lake. As the population continues to increase, the number of management plans that limit use of lakes will increase as well.

SPORT FISHERY PERFORMANCE IN 2013

In 2013, 85 lakes were stocked with 671,326 game fish (Table 70). The majority of these lakes are located in the KAMU and the remainder in the ESMU. Releases in 2013 included 539,641 rainbow trout, 74,639 coho salmon, 15,673 Arctic grayling, and 16,318 Arctic char (Table 73).

An estimated 26,810 angler-days of participation resulted from the area’s landlocked stocking program in 2013 (Tables 71 and 72), excluding effort at lakes having both stocked and indigenous game fish. The 2013 catch from stocked landlocked lakes included an estimated 38,847 rainbow trout, of which 7,319 (19%) were harvested; 7,754 landlocked salmon, of which 23% were harvested; 2,189 Arctic grayling, of which 3% were harvested (an increase of over 1,600 fish from 2012); and 2,042 Arctic char, of which 19% were harvested (Table 71).

The Kepler Lake Complex (including Kepler, Bradley, Canoe, Echo, Irene, Long, Matanuska, and Victor lakes) supported 7,594 angler-days of effort. Finger Lake supported 6,118 angler-days of effort (Table 2). Collectively, these 2 sites yielded approximately 46% of the effort associated with stocked landlocked lakes within the NCIMA⁹.

Rainbow trout and landlocked Chinook salmon dominate catch in stocked lakes. In 2013, these 2 species composed 91% of the stocked lakes catch (calculated from Tables 71 and 72).

PERSONAL USE AND SUBSISTENCE FISHERIES

OVERVIEW

Brannian and Fox (1996) and Reimer and Sigurdsson (2004) provide a detailed history of subsistence and personal use salmon fishing regulation and management in UCI. Sockeye salmon is the predominant harvest in these fisheries in UCI.

Fish Creek sockeye salmon have long been used in commercial, subsistence¹⁰, and personal use fisheries. The Knik Arm subsistence fishery was operational through 1970. In 1971, the fishery

⁹ Alaska Sport Fishing Survey database [Internet]. 1996– . Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish [cited January, 2015]. Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

¹⁰ Engel, L. and D. Vincent-Lang. *Unpublished*. Area Management Report for the recreational fisheries of Northern Cook Inlet. Report to the Alaska Board of Fisheries, November 1992. Alaska Department of Fish and Game, Division of Sport Fish, Anchorage.

was closed because of declining sockeye salmon escapements into Fish Creek. It was reopened in 1984 and 1985, and then closed again in 1986.

The Fish Creek commercial set gillnet and personal use dip net fisheries along the northwest shore of Knik Arm were initiated by the BOF in 1986 to harvest sockeye salmon surplus to spawning and egg-take needs. These fisheries continued annually, contingent upon a projected escapement of 50,000 Fish Creek sockeye salmon. The commercial gillnet fishery was closed by BOF action from 1999 through 2001 due to low returns in 1997 and 1998. The fishery was eliminated by the BOF in 2002 because runs continued below desired escapement levels. Average annual harvest of sockeye salmon in the commercial gillnet fishery while in existence was 23,443 fish (Table 74). The personal use fishery was opened in 2011 and closed in 2012–2013.

The *Upper Cook Inlet Subsistence Management Plan* provided for a subsistence set gillnet fishery in marine waters in the Northern District of UCI in 1991, 1992, and 1994. Subsistence set gillnet fishing was allowed for a total of 17 days between 21 May and 28 September. Hours for the fishery were 8:00 AM until 8:00 PM. The threat of a court-ordered closure of this subsistence fishery for the 1995 season caused the BOF to take action to allow the fishery to proceed as a personal use gillnet fishery. Annual harvest ranged from 3,900 fish in 1985 to 53,300 fish in 1994, with an average harvest of 31,500 sockeye salmon (Sweet et al. 2003: Table 60). Coho, sockeye, and pink salmon were harvested as well. This personal use gillnet fishery was eliminated by the BOF prior to the 1996 season.

FISHERY DESCRIPTIONS

The current personal use fisheries within the NCIMA include a sockeye salmon dip net fishery in Fish Creek, a dip net fishery for Alaska residents 60 or older on the Beluga River, and a personal use eulachon (*Thaleichthys pacificus*) fishery, the majority of which takes place in the Susitna River. There is also a small harvest of eulachon in the Knik Unit at the mouth of Fish Creek (Table 75).

Subsistence fisheries include the Yentna River subsistence fish wheel fishery and the Tyonek subsistence fishery. The Yentna River subsistence fishery occurs in the mainstem Yentna River from its confluence with Martin Creek upstream to its confluence with the Skwentna River and is prosecuted only by fish wheel. The Tyonek subsistence fishery occurs adjacent to the community of Tyonek; harvest occurs by gillnets (see also Appendix C1).

FISH CREEK SOCKEYE SALMON STOCKING PROGRAM

Due to the declining abundance of sockeye salmon during the early 1970s, stocking of Fish Creek with sockeye salmon was initiated in 1975. The Big Lake state fish hatchery supported the program through 1992 using Fish Creek broodstock. After the Big Lake hatchery closed in 1993, stocking continued using Fish Creek broodstock reared at the Eklutna Hatchery, a private nonprofit hatchery operated by CIAA and located on the Knik River in the Eklutna Power Plant tailrace. CIAA discontinued operation of the Eklutna Hatchery in 1998 following the 1997 release, at which time the program was switched to the Trail Lakes Hatchery, another CIAA facility. Production goals were 9 million sockeye salmon eggs of Fish Creek brood from which sockeye salmon fry and smolt were released annually into the Big Lake drainage. Stocking was discontinued after the 2008 release.

HISTORICAL HARVEST AND ESCAPEMENT

The personal use dip net fishery on Fish Creek sustained an annual average harvest of 10,533 sockeye salmon from 1987 to 2012, ranging from 463 fish in 2001 to 37,224 fish in 1993 (Table 74). The fishery was closed by EO after the third day in 2001 and since then has been opened 3 times (2009–2011) with an average harvest of 11,600 salmon. Prosecution of this fishery is dependent on projected escapements into Fish Creek. This dip net fishery may open between 10 July and 31 July when the escapement of sockeye salmon is projected to be more than 50,000 fish. Levels of escapement in the past 10 years varied from 14,215 sockeye salmon in 2005 to 126,836 in 2010.

The average Susitna River eulachon harvest from 2003 to 2012 was 2,718 fish and ranged from 0 to 7,760 fish (Table 75). The inriver run of eulachon to the Susitna River drainage ranges in the millions, with the personal use harvest accounting for less than 1% of this run. In terms of harvest, this fishery is probably one of the most underutilized in the state. It is managed inseason with spot checks conducted by ADF&G staff in the Palmer office and postseason through the SWHS. It is likely that unless increased access is provided to the Susitna River, the personal use harvest of eulachon will remain fairly stable. No eulachon were reported harvested in the KAMU. It should be noted that no reported harvest has occurred since 2007, which most likely indicates low participation in this fishery, making it difficult to estimate harvest through the SWHS, which randomly surveys anglers.

The personal use dip net fishery on Beluga River began in 2008. The peak of salmon harvest in this fishery to date is 225 salmon in 2009 (Table 76). The lowest harvest to date was in 2012 with a harvest of only 16 salmon.

Average annual salmon harvest in the upper Yentna River subsistence fishery was 495 fish from 2003 to 2012. Sockeye salmon are the primary species harvested. For the same period, the average sockeye salmon harvest was 387 fish (Table 77).

The Tyonek subsistence fishery average Chinook salmon harvest from 1981 to 2012 was 1,221 fish, which was above the 2008–2012 average of 818 Chinook salmon. An average of 135 sockeye and 126 coho salmon were harvested from 1981 to 2012. Very few chum and pink salmon are harvested in this subsistence fishery (Table 78).

FISHERY MANAGEMENT AND OBJECTIVES

In 2002, the SEG for sockeye salmon on Fish Creek was changed from a point goal of 50,000 fish to a range of 20,000–70,000 fish. Further, the Fish Creek dip net fishery was modified under the *Upper Cook Inlet Personal Use Salmon Fisheries Management Plan* (5AAC 77.540). The commissioner of ADF&G will open the fishery from 10 July through 31 July, if ADF&G projects the escapement of sockeye salmon into Fish Creek will be above the upper end of the escapement goal of 20,000–70,000 fish. Prior to 2002, the fishery was open until closed by EO. Participants in the fishery must obtain an UCI personal use permit, which also includes the Kenai River and Kasilof River personal use dip net fisheries, and the Kasilof River set gillnet personal use fishery. The annual limit is 25 fish for the head of household plus 10 fish for each additional member of the household, and is inclusive of all UCI personal use fisheries. Permits must be returned with the total catch recorded. The closing date is set at 31 July to limit the number of coho salmon harvested.

The management objective for the Fish Creek personal use fishery is to allow escapement of sockeye salmon along the entire course of the run while harvesting fish in excess of spawning needs. There are no specific management objectives for the personal use eulachon fishery. All fisheries are managed to provide sustained yield.

Management of Fish Creek sockeye salmon has undergone many changes in conjunction with an observed decline in total escapements in recent years. During the February 2002 BOF meeting, Fish Creek sockeye salmon were designated a stock of yield concern after demonstrating a chronic inability to meet the escapement goal (50,000 fish at that time) over the previous 5 years (Figure 29, Table 55). At the same meeting, an SEG of 20,000–70,000 fish was recommended based on wild fish (prehatchery) escapements from 1938 to 1978 (Bue and Hasbrouck *Unpublished*). An action plan was developed, as directed by the BOF in 2002, to modify current land use patterns that may adversely affect fish habitat resource values in the Fish Creek watershed through education, increased community planning involvement, and escapement monitoring and research toward the goal of achieving the SEG. Specific actions recommended for achieving this objective may be found in Sweet et al. (2004). During the February 2011 BOF meeting, the BOF determined a personal use fishery to be opened when ADF&G projects the escapement to exceed 50,000 sockeye salmon. Contributions of hatchery fish to the Fish Creek escapement are estimated to be 17% for 2012, and have ranged from 2% in 2002 to 73% in 2006 (Table 79). Fish Creek was last stocked by CIAA in 2008 and hatchery fish no longer contribute to this return.

Litchfield and Willette (2002) found dissolved oxygen and nutrient concentrations similar to levels experienced in the early 1980s, suggesting no relationship to the decline in survival of Fish Creek sockeye salmon. Aggregate survival (hatchery and wild fish) to the smolt life stage was one-quarter the survival rates of other sockeye salmon-producing systems during the late 1980s. Further, wild survival to the smolt stage was lower than hatchery-origin fish. Two plausible explanations for the overall decline in wild stock productivity were identified: 1) a cofferdam at the Big Lake outlet could have reduced productivity of the subpopulation spawning below the dam, and 2) Big Lake Hatchery operations prevented sockeye salmon from entering Meadow Creek above the hatchery in an effort to reduce potential spread of disease (Litchfield and Willette 2002). The cofferdam was removed in 2004 in an attempt to improve passage of fry into the lake (Hasbrouck and Edmundson 2007). The Fish Creek stock was reevaluated at the 2005 BOF meeting where it was determined to no longer be a stock of yield concern. The Fish Creek personal use fishery was not opened 2001–2008 and 2012–2013.

The BOF established the Skwentna River personal use salmon fishery in March 1996. As a result of actions by the State of Alaska Supreme Court and the BOF, it was reinstated as the Upper Yentna River subsistence salmon fishery beginning in 1998. The open season for this subsistence fishery is 15 July through 31 July from 4:00 AM until 8:00 PM on Mondays, Wednesdays, and Fridays. During the February 2011 meeting, the Board of Fisheries determined that 400–750 salmon other than Chinook salmon are reasonably necessary for subsistence uses in the Yentna River drainage.

Regulations for a Tyonek subsistence fishery were established in 1980 and amended in 2011. Participants are allowed to harvest all salmon species. Residents of Tyonek are the major participants in the fishery. The season starts on 15 May and continues through 15 October. The fishery is open from 15 May to 15 June on Tuesdays, Thursdays, and Fridays from 4:00 AM to 8:00 PM. From 16 June through 15 October, fishing shifts to Saturdays only. This fishery is

prosecuted by gillnet 10 fathoms in length by 45 meshes deep, with 6-inch mesh. During the February 2011 meeting, the BOF determined 700–2,700 Chinook salmon and 150–500 salmon other than Chinook salmon are reasonably necessary for subsistence use in the Tyonek Subdistrict.

During 2008, the BOF opted to create a personal use fishery for residents over the age of 60 in the Beluga Area. This fishery was predicated on the loss of fishing opportunity in the Beluga area as a result of pike predation on sockeye salmon in Three Mile Creek, lack of access to area fisheries, and poor Chinook salmon returns to WCI streams. The fishery occurs annually from 10 July to 31 August. A permit holder may obtain his or her annual limit of 25 salmon per head of household and 10 additional salmon per listed dependent. No Chinook salmon may be retained, and a cap of 500 other salmon is enforced. All Chinook salmon caught must be released immediately. This permit is only good for the Beluga River and does not allow the permittee to participate in any other Alaskan personal use fishery.

FISHERY PERFORMANCE AND ESCAPEMENT IN 2013

At Fish Creek, the preseason forecast (2013) was for a total run of 79,000 sockeye salmon with half assumed harvested in Cook Inlet commercial fisheries. The 50,000 fish trigger could not be projected during the season and the dip net fishery was not opened. The final weir count was 18,912 sockeye salmon (Table 55) and short of the goal (SEG 20,000–70,000).

Participants of the Beluga personal use fishery harvested 88 salmon in 2013, which was below the previous 5-year average of about 100 fish (Table 76).

A total of 412 salmon were harvested in the upper Yentna River subsistence fishery in 2013, which was below the 1996–2012 average of 512 salmon (Table 77). The 2013 harvest per permit holder was 19 fish, compared to the average harvest per permit holder (1996–2012) of 25 fish. Sockeye salmon are the target species, although some coho, pink, and chum salmon are also harvested. No Chinook salmon harvest is allowed.

Chinook salmon dominate the harvest in the Tyonek subsistence fishery, with a smaller harvest of coho and sockeye salmon. Few pink and chum salmon are harvested. The number of permits issued in 2013 was 108, and the total salmon harvest was 1,189 fish (Table 78). The majority of the total catch was Chinook salmon (817 fish).

The 2013 NCIMA estimated eulachon harvest was 1,704 fish, mostly from the Susitna River, and less than 100 from the Yentna River (Table 75). No eulachon were reported harvested in the KAMU. It should be noted that no reported harvest has occurred in the past. This most likely indicates low fishery participation, which makes it difficult to estimate harvest through the SWHS, which surveys anglers randomly. Inseason observations of run strength in the WSMU by staff in 2013 indicated good runs. The WSMU eulachon harvest in 2013 of 1,704 was below the 2008–2012 average of 4,010 fish.

EDUCATIONAL FISHERIES

FISHERY DESCRIPTION

The first educational fishery, the 1989 Kenaitze Tribal fishery (on the Kenai Peninsula), originated as a Federal Court–ordered subsistence fishery resulting from extensive legislation and litigation related to both state and federal interpretation of subsistence. Prior to the 1993

fishing season, the Alaska Superior Court, in negotiations with ADF&G and the Kenaitze Tribe, ordered ADF&G to issue educational fishing permits.

The Knik Tribal Council and the Native Village of Eklutna were first issued educational fishing permits for the 1994 season. These educational fisheries, originally ordered as interim fisheries until the court cases were decided, have been applied for and renewed by ADF&G annually. The Tyonek Subsistence Camp was issued permits from 1998 to 2000. More recently, an additional educational fishery (McLaughlin Youth) was added in the NCIMA. Educational fishery permits were issued to the Big Lake Cultural Outreach Program from 2005 to 2013, and 1 permit was issued to the Intertribal Native Leadership group in 2006. The current educational fisheries are limited to certain areas and periods of operation as described in the following Fishery Management and Objectives section. In general, the Eklutna and Knik villages fish waters adjacent to their respective communities. Educational fishing also takes place along the north shores of Goose Bay and Pt. MacKenzie and on Fire Island.

HISTORICAL HARVEST

The total salmon harvest by the Knik Tribal Council educational fishery averaged 254 fish annually from 1994 to 2012 (Table 80). The Eklutna Native Village educational fishery harvested an average of 334 salmon annually during the same period, and Big Lake Cultural Outreach harvest averaged 121 salmon from 2005 to 2012.

FISHERY MANAGEMENT AND OBJECTIVES

The objective of this fishery is to implement the provisions of the permit. Standards, general conditions, and requirements of an educational fishery program were established by the BOF and are administered under Chapter 93 of the Alaska Administrative Code (5 AAC 93.200–235). The open fishing season is from 1 May to 30 September. The fishery can take place at the discretion of the permit holder, except in the Fish Creek Terminal Harvest Area during commercial fishery openings and on Mondays or Thursdays, when commercial openings are scheduled in the Northern District between Point MacKenzie and the Little Susitna River and adjacent to Fire Island. Otherwise, the fishery may be prosecuted in waters of the Northern District between Point Mackenzie and Little Susitna River and adjacent to Fire Island, and in waters within 1 mile of average high water on the western shore of Knik Arm from the Goose Bay airstrip beach access road boat launch located on the north shore of Goose Bay to Fish Creek. The educational fishery may not occur in the tidal channel of Fish Creek or in Fish Creek. Permits are issued on an annual basis and must be renewed each year. Permit holders must submit a postseason summary to ADF&G as indicated in the specifications. A failure to meet specifications will result in nonrenewal of a permit. Council and Tribal objectives for the educational fisheries include teaching and preserving the cultural and traditional subsistence way of life as well as providing food for elders and others in need.

Reports on the educational program, as required by each permit, have been submitted annually to the NCIMA biologist and compiled in the Area Management Report. Educational fishery salmon harvests are minimal, and they do not affect inriver sport fisheries.

FISHERY PERFORMANCE AND ESCAPEMENT IN 2013

The Knik Tribal Council educational fishery salmon harvest in 2013 was 113. The majority of the harvest was chum salmon, with 52 fish harvested in 2013, followed by coho salmon, with 31 and sockeye salmon with 26 (Table 80).

The educational fishery conducted by Eklutna Native Village harvested 196 salmon in 2013. The majority of the harvest was sockeye salmon with 124 fish. This is the lowest recorded harvest since 1999 (Table 80).

The Big Lake Cultural Outreach educational fishery began in 2005. In its first year, the group harvested a total of 348 salmon, with coho salmon (99 fish) and sockeye salmon (98 fish) composing over half of their harvest (Table 80). In 2013, this educational fishery recorded 30 salmon; 21 were sockeye salmon.

The McLaughlin educational fishery was new in 2012. They did not fish in 2013 (Table 80).

Due to low Chinook salmon abundance, the Tyonek Village permit was not issued in 2013.

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TABLES

Table 1.—Number of angler-days of sport fishing effort expended by sport anglers fishing Northern Cook Inlet Management Area waters, 1977–2013.

| Year | Northern Cook Inlet Management Area | | | | | | | | | | NCIMA % of Region II | | |
|------|-------------------------------------|----|------------------|----|------------------|----|---------------------------------|---|--------------------------|---------------------------|-------------------------------|-------------------------|---|
| | Knik Arm | | Eastside Susitna | | Westside Susitna | | West Cook Inlet ^a | | NCIMA total effort | Alaska total effort | | NCIMA % of Alaska | Region II total effort ^b |
| | Effort | % | Effort | % | Effort | % | Effort | % | | | | | |
| 1977 | 81,949 | 48 | 56,651 | 33 | 29,211 | 17 | 2,735 | 2 | 170,546 | 1,198,486 | 14 | 828,351 | 21 |
| 1978 | 75,540 | 38 | 86,010 | 43 | 35,709 | 18 | 2,262 | 1 | 199,521 | 1,285,063 | 16 | 913,417 | 22 |
| 1979 | 78,411 | 38 | 78,222 | 38 | 48,362 | 23 | 2,012 | 1 | 207,007 | 1,364,739 | 15 | 1,014,018 | 20 |
| 1980 | 102,530 | 42 | 91,277 | 38 | 46,768 | 19 | 1,357 | 1 | 241,932 | 1,488,962 | 16 | 1,072,384 | 23 |
| 1981 | 105,052 | 52 | 59,854 | 30 | 35,072 | 17 | 2,263 | 1 | 202,241 | 1,420,172 | 14 | 1,016,731 | 20 |
| 1982 | 91,713 | 41 | 80,745 | 36 | 50,738 | 23 | 1,126 | 1 | 224,322 | 1,623,090 | 14 | 1,131,358 | 20 |
| 1983 | 138,389 | 50 | 67,471 | 24 | 63,919 | 23 | 6,237 | 2 | 276,016 | 1,732,528 | 16 | 1,212,680 | 23 |
| 1984 | 130,727 | 46 | 81,758 | 29 | 61,263 | 22 | 7,512 | 3 | 281,260 | 1,866,837 | 15 | 1,341,658 | 21 |
| 1985 | 122,626 | 43 | 67,764 | 24 | 77,092 | 27 | 16,455 | 6 | 283,937 | 1,943,069 | 15 | 1,406,419 | 20 |
| 1986 | 131,606 | 40 | 92,289 | 28 | 87,736 | 27 | 13,537 | 4 | 325,168 | 2,071,412 | 16 | 1,518,712 | 21 |
| 1987 | 140,167 | 44 | 77,817 | 24 | 84,448 | 26 | 16,247 | 5 | 318,679 | 2,152,886 | 15 | 1,556,050 | 20 |
| 1988 | 183,029 | 46 | 107,977 | 27 | 95,339 | 24 | 11,875 | 3 | 398,220 | 2,311,291 | 17 | 1,679,939 | 24 |
| 1989 | 146,912 | 41 | 96,864 | 27 | 96,308 | 27 | 14,851 | 4 | 354,935 | 2,264,079 | 16 | 1,583,381 | 22 |
| 1990 | 142,884 | 41 | 101,917 | 29 | 92,435 | 26 | 14,392 | 4 | 351,628 | 2,453,284 | 14 | 1,745,110 | 20 |
| 1991 | 146,605 | 39 | 113,178 | 30 | 104,072 | 28 | 13,336 | 4 | 377,191 | 2,456,328 | 15 | 1,782,055 | 21 |
| 1992 | 141,825 | 35 | 149,484 | 37 | 101,496 | 25 | 11,000 | 3 | 403,805 | 2,540,374 | 16 | 1,889,930 | 21 |
| 1993 | 118,214 | 32 | 128,382 | 35 | 106,724 | 29 | 17,993 | 5 | 371,313 | 2,559,408 | 15 | 1,867,233 | 20 |
| 1994 | 143,372 | 38 | 114,533 | 30 | 106,112 | 28 | 15,950 | 4 | 379,967 | 2,719,911 | 14 | 1,966,985 | 19 |
| 1995 | 126,154 | 42 | 102,686 | 34 | 60,177 | 20 | 12,557 | 4 | 301,574 | 2,787,670 | 11 | 1,985,539 | 15 |
| 1996 | 90,990 | 40 | 83,227 | 36 | 42,717 | 19 | 12,146 | 5 | 229,080 | 2,006,528 | 11 | 1,434,943 | 16 |
| 1997 | 95,730 | 39 | 85,228 | 35 | 50,366 | 21 | 11,218 | 5 | 242,542 | 2,079,514 | 12 | 1,400,983 | 17 |
| 1998 | 78,218 | 35 | 89,014 | 40 | 44,931 | 20 | 10,019 | 5 | 222,182 | 1,856,976 | 12 | 1,258,482 | 18 |
| 1999 | 112,642 | 34 | 133,310 | 40 | 74,374 | 22 | 14,402 | 4 | 334,728 | 2,499,152 | 13 | 1,659,966 | 20 |
| 2000 | 121,601 | 33 | 141,609 | 38 | 88,503 | 24 | 18,483 | 5 | 370,196 | 2,627,805 | 14 | 1,844,824 | 20 |

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Table 1.–Page 2 of 2.

| Year | Northern Cook Inlet Management Area | | | | | | | | NCIMA total effort | Alaska total effort | NCIMA % of Alaska | Region II total effort ^b | NCIMA % of Region II |
|-----------|-------------------------------------|----|------------------|----|---------------------|----|---------------------------------|---|--------------------------|---------------------------|-------------------------|---|-------------------------------|
| | Knik Arm | | Eastside Susitna | | Westside Susitna | | West Cook Inlet ^a | | | | | | |
| | Effort | % | Effort | % | Effort | % | Effort | % | | | | | |
| 2001 | 111,027 | 35 | 121,039 | 38 | 73,885 | 23 | 14,205 | 4 | 320,156 | 2,261,941 | 14 | 1,560,562 | 21 |
| 2002 | 126,194 | 39 | 116,254 | 36 | 63,286 | 20 | 16,335 | 5 | 322,069 | 2,259,091 | 14 | 1,569,513 | 21 |
| 2003 | 103,978 | 35 | 112,061 | 37 | 66,882 | 22 | 16,927 | 6 | 299,848 | 2,219,398 | 14 | 1,535,501 | 20 |
| 2004 | 113,528 | 36 | 107,689 | 35 | 72,721 | 23 | 17,809 | 6 | 311,747 | 2,473,961 | 13 | 1,709,671 | 18 |
| 2005 | 115,763 | 39 | 87,893 | 29 | 73,971 | 25 | 20,459 | 7 | 298,086 | 2,463,929 | 12 | 1,712,610 | 17 |
| 2006 | 119,795 | 41 | 85,029 | 29 | 73,700 | 25 | 15,771 | 5 | 294,295 | 2,297,961 | 13 | 1,605,852 | 18 |
| 2007 | 120,681 | 40 | 87,177 | 29 | 70,923 | 24 | 19,705 | 7 | 298,486 | 2,543,674 | 12 | 1,799,352 | 17 |
| 2008 | 136,572 | 48 | 85,755 | 30 | 47,061 | 16 | 16,627 | 6 | 286,015 | 2,315,601 | 12 | 1,622,920 | 18 |
| 2009 | 122,508 | 48 | 72,109 | 29 | 43,273 | 17 | 14,948 | 6 | 252,838 | 2,216,445 | 11 | 1,522,345 | 17 |
| 2010 | 106,281 | 46 | 63,025 | 27 | 48,298 | 21 | 14,512 | 6 | 232,116 | 2,000,167 | 12 | 1,371,492 | 17 |
| 2011 | 54,791 | 34 | 56,121 | 35 | 40,657 | 25 | 10,184 | 6 | 161,753 | 1,919,313 | 8 | 1,326,950 | 12 |
| 2012 | 58,673 | 37 | 50,521 | 32 | 40,255 | 25 | 10,682 | 7 | 160,131 | 1,885,786 | 8 | 1,252,263 | 13 |
| Average | | | | | | | | | | | | | |
| 1977–2012 | 114,908 | 40 | 92,554 | 32 | 66,633 | 23 | 12,170 | 4 | 286,265 | 2,115,745 | 14 | 1,491,672 | 19 |
| 2003–2012 | 105,257 | 40 | 80,738 | 31 | 57,774 | 22 | 15,762 | 6 | 259,531 | 2,233,624 | 12 | 1,545,896 | 17 |
| 2008–2012 | 95,765 | 43 | 65,506 | 30 | 43,909 | 21 | 13,391 | 6 | 218,571 | 2,067,462 | 10 | 1,419,194 | 15 |
| 2013 | 76,112 | 40 | 63,195 | 33 | 37,623 | 20 | 12,400 | 6 | 189,330 | 1,885,786 | 10 | 1,252,263 | 15 |

Source: Mills (1979, 1980, 1981a, 1981b, 1982–1994); Howe et al. (1995, 1996); Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

^a Data include saltwater effort from outside the North Cook Inlet Management Area, as reported in the Statewide Fishing Survey.

^b ADF&G, Sport Fish Division, Southcentral Region (i.e., Region II) includes the following management areas: Anchorage Area, Bristol Bay, Kodiak–Aleutians, Lower Cook Inlet (Kenai), Northern Cook Inlet (Mat-Su), Prince William Sound Area, Seward North Gulf Coast, and Upper Kenai Peninsula.

Table 2.—Angler-days of sport fishing effort for the Knik Arm Management Unit by fishery, 1977–2013.

| Year | Marine | Little Susitna River | Knik River ^a | Eklutna Tailrace | Wasilla Creek | Cottonwood Creek | Big Lake drainage streams | Finger Lake | Kepler Lk complex | Big Lake | Nancy Lk complex | Other lakes ^b | Other streams | Total |
|------|--------|----------------------------|----------------------------|---------------------|------------------|---------------------|------------------------------------|----------------|-------------------------|-------------|------------------------|-----------------------------|------------------|---------|
| 1977 | | 11,063 | | | 2,805 | | | 14,864 | 7,962 | 11,869 | 7,259 | 26,127 | | 81,949 |
| 1978 | | 12,127 | | | 3,446 | | | 11,502 | 5,730 | 9,865 | 7,647 | 25,223 | | 75,540 |
| 1979 | | 21,301 | | | 4,024 | 5,345 | | 4,433 | 5,439 | 8,300 | 7,011 | 22,558 | | 78,411 |
| 1980 | | 22,420 | | | 5,726 | 9,268 | | 6,483 | 8,597 | 12,195 | 9,153 | 28,688 | | 102,530 |
| 1981 | | 26,162 | 4,904 | | 4,019 | 8,663 | | 5,267 | 8,227 | 14,568 | 8,488 | 24,754 | | 105,052 |
| 1982 | | 24,020 | 6,653 | | 6,261 | 5,186 | | 3,514 | 6,943 | 15,371 | 8,615 | 15,150 | | 91,713 |
| 1983 | 17,127 | 35,477 | 9,183 | | 3,239 | 5,944 | | 8,512 | 9,149 | 15,989 | 10,907 | 19,571 | 3,291 | 138,389 |
| 1984 | 4,316 | 48,517 | 9,369 | 3,413 | 3,547 | 7,144 | | 6,843 | 9,770 | 12,916 | 7,194 | 15,892 | 1,806 | 130,727 |
| 1985 | 692 | 41,643 | 8,970 | 2,995 | 3,115 | 4,560 | 903 | 4,259 | 9,226 | 16,299 | 5,960 | 22,243 | 1,761 | 122,626 |
| 1986 | 983 | 45,770 | 13,015 | 8,549 | 3,387 | 5,653 | 2,641 | 5,589 | 9,544 | 14,559 | 6,520 | 13,147 | 2,249 | 131,606 |
| 1987 | 1,974 | 35,659 | 6,990 | 11,663 | 2,173 | 2,934 | 2,898 | 10,830 | 14,379 | 17,693 | 15,125 | 16,187 | 1,662 | 140,167 |
| 1988 | 1,239 | 49,731 | 23,229 | 13,188 | 2,228 | 4,056 | 3,110 | 8,240 | 18,245 | 10,077 | 12,099 | 35,159 | 2,428 | 183,029 |
| 1989 | 2,352 | 54,798 | 11,141 | 10,342 | 2,406 | 3,069 | 4,204 | 4,840 | 12,821 | 12,748 | 8,349 | 19,024 | 818 | 146,912 |
| 1990 | 2,494 | 40,159 | 17,878 | 7,618 | 2,679 | 3,056 | 3,936 | 6,737 | 13,644 | 11,798 | 9,973 | 19,949 | 2,963 | 142,884 |
| 1991 | 3,147 | 50,838 | 13,736 | 5,892 | 2,893 | 1,623 | 3,693 | 5,998 | 11,337 | 13,759 | 10,239 | 20,043 | 3,407 | 146,605 |
| 1992 | 1,540 | 49,304 | 8,856 | 4,279 | 1,110 | 1,974 | 4,534 | 5,506 | 15,556 | 11,545 | 12,299 | 24,723 | 599 | 141,825 |
| 1993 | 2,116 | 42,249 | 6,824 | 4,523 | 1,774 | 3,077 | 2,976 | 7,843 | 7,461 | 8,446 | 9,393 | 20,606 | 926 | 118,214 |
| 1994 | 1,244 | 45,149 | 9,658 | 8,974 | 2,226 | 3,230 | 3,496 | 9,434 | 11,832 | 9,987 | 10,197 | 25,063 | 2,882 | 143,372 |
| 1995 | 940 | 41,119 | 10,893 | 11,453 | 1,373 | 2,598 | 2,256 | 7,814 | 10,885 | 6,979 | 9,723 | 18,928 | 1,193 | 126,154 |
| 1996 | 966 | 24,575 | 7,561 | 6,448 | 1,386 | 1,783 | 934 | 8,962 | 7,431 | 7,290 | 5,140 | 17,464 | 1,050 | 90,990 |
| 1997 | 672 | 27,883 | 5,349 | 3,835 | 1,188 | 2,070 | 1,104 | 7,242 | 8,139 | 9,644 | 7,275 | 19,944 | 1,385 | 95,730 |
| 1998 | 952 | 22,108 | 5,272 | 5,100 | 1,171 | 3,454 | 2,256 | 4,286 | 6,500 | 6,143 | 4,861 | 15,729 | 386 | 78,218 |
| 1999 | 250 | 30,437 | 6,860 | 6,150 | 990 | 3,506 | 2,182 | 8,076 | 9,149 | 8,418 | 7,899 | 26,981 | 1,744 | 112,642 |
| 2000 | 447 | 39,556 | 10,975 | 7,938 | 328 | 1,265 | 1,408 | 7,786 | 8,708 | 7,587 | 8,670 | 25,519 | 1,414 | 121,601 |

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Table 2.–Page 2 of 2.

| Year | Marine | Little Susitna River | Knik River ^a | Eklutna Tailrace | Wasilla Creek | Cottonwood Creek | Big Lake drainage streams | Finger Lake | Kepler Lk complex | Big Lake | Nancy Lk complex | Other lakes ^b | Other streams | Total |
|-----------|--------------|----------------------|-------------------------|------------------|---------------|------------------|---------------------------|-------------|-------------------|----------|------------------|--------------------------|---------------|---------|
| 2001 | 622 | 33,521 | 13,028 | 10,166 | 419 | 2,627 | 1,670 | 6,902 | 8,439 | 5,555 | 6,789 | 20,831 | 458 | 111,027 |
| 2002 | 1,218 | 40,346 | 17,989 | 11,767 | 1,037 | 1,534 | 2,776 | 7,094 | 6,108 | 5,176 | 5,659 | 24,612 | 878 | 126,194 |
| 2003 | 435 | 31,993 | 13,474 | 8,423 | 757 | 2,238 | 1,182 | 5,096 | 6,470 | 5,226 | 6,653 | 21,267 | 764 | 103,978 |
| 2004 | 184 | 33,819 | 19,342 | 9,588 | 1,079 | 3,282 | 2,029 | 4,713 | 6,958 | 4,430 | 5,501 | 21,954 | 649 | 113,528 |
| 2005 | 802 | 27,490 | 19,605 | 19,339 | 684 | 1,484 | 1,461 | 5,514 | 4,719 | 6,481 | 4,391 | 22,989 | 804 | 115,763 |
| 2006 | 323 | 28,547 | 25,271 | 20,465 | 869 | 3,867 | 948 | 6,055 | 5,684 | 5,616 | 7,279 | 14,225 | 646 | 119,795 |
| 2007 | 590 | 35,636 | 21,342 | 22,619 | 1,194 | 3,448 | 907 | 3,229 | 3,926 | 5,261 | 5,053 | 16,087 | 1,389 | 120,681 |
| 2008 | 325 | 31,989 | 27,874 | 20,586 | 1,394 | 2,718 | 1,343 | 7,715 | 8,264 | 7,326 | 4,958 | 21,426 | 654 | 136,572 |
| 2009 | 159 | 28,151 | 23,925 | 22,625 | 1,619 | 2,679 | 2,092 | 6,821 | 6,881 | 3,415 | 6,081 | 17,395 | 665 | 122,508 |
| 2010 | 124 | 24,846 | 16,140 | 14,708 | 2,354 | 2,064 | 2,966 | 4,821 | 5,594 | 4,369 | 8,736 | 18,867 | 692 | 106,281 |
| 2011 | 139 | 12,779 | 9,810 | 5,972 | 1,300 | 1,736 | 970 | 4,338 | 5,899 | 3,080 | 4,377 | 3,633 | 758 | 54,791 |
| 2012 | ^c | 10,115 | 7,474 | 5,475 | 506 | 884 | 1,343 | 2,439 | 3,161 | 4,151 | 3,096 | 19,596 | 433 | 58,673 |
| Average | | | | | | | | | | | | | | |
| 1977–2012 | 1,668 | 32,814 | 12,893 | 10,141 | 2,131 | 3,471 | 2,222 | 6,655 | 8,577 | 9,281 | 7,738 | 20,599 | 1,358 | 114,908 |
| 2003–2012 | 342 | 26,537 | 18,426 | 14,980 | 1,176 | 2,440 | 1,524 | 5,074 | 5,756 | 4,936 | 5,613 | 17,744 | 745 | 105,257 |
| 2008–2012 | 187 | 21,576 | 17,045 | 13,873 | 1,435 | 2,016 | 1,743 | 5,227 | 5,960 | 4,468 | 5,450 | 16,183 | 640 | 95,765 |
| 2013 | ^c | 12,012 | 8,474 | 8,370 | 1,569 | 901 | 1,033 | 6,118 | 7,594 | 4,030 | 6,014 | 19,252 | 745 | 76,112 |

Source: Mills (1979, 1980, 1981a, 1981b, 1982–1994); Howe et al. (1995, 1996); Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

^a Knik River and tributaries including Jim Creek.

^b Includes effort for lakes and streams, 1977–1982.

^c No data.

Table 3.—Angler-days of sport fishing effort for the Eastside Susitna River Management Unit by fishery, 1977–2013.

| Year | Willow Creek | Little Willow | Kashwitna River | Caswell Creek | Sheep Creek | Goose Creek | Montana Creek | Birch Creek | Sunshine Creek | Talkeetna River ^a | Other streams ^b | Lakes | Total |
|------|--------------|---------------|-----------------|---------------|-------------|-------------|---------------|-------------|----------------|------------------------------|----------------------------|--------|---------|
| 1977 | 14,024 | 4,583 | | | 8,112 | | 14,268 | | | 3,163 | | 12,501 | 56,651 |
| 1978 | 22,682 | 5,687 | | | 11,869 | | 25,762 | | | 5,040 | | 14,970 | 86,010 |
| 1979 | 18,911 | 5,171 | | 3,710 | 6,728 | | 22,621 | | 3,317 | 5,125 | | 12,639 | 78,222 |
| 1980 | 29,011 | 8,190 | | 4,963 | 8,014 | | 19,287 | | 5,208 | 4,388 | | 12,216 | 91,277 |
| 1981 | 14,060 | 3,845 | | 3,860 | 6,936 | | 16,657 | | 3,062 | 3,584 | | 7,850 | 59,854 |
| 1982 | 19,704 | 5,579 | | 5,101 | 9,093 | | 23,645 | | 3,787 | 3,856 | | 9,980 | 80,745 |
| 1983 | 13,405 | 2,791 | 1,344 | 5,048 | 6,237 | | 17,109 | | 3,429 | 7,564 | 5,460 | 5,084 | 67,471 |
| 1984 | 21,649 | 5,872 | 2,995 | 4,952 | 6,106 | 1,305 | 19,239 | | 3,229 | 9,252 | 4,417 | 2,742 | 81,758 |
| 1985 | 16,282 | 5,705 | | 5,289 | 2,844 | | 20,028 | | 4,144 | 7,213 | 4,162 | 2,097 | 67,764 |
| 1986 | 10,733 | 4,490 | 2,908 | 4,362 | 10,091 | 1,993 | 20,268 | 2,010 | 8,124 | 8,638 | 10,566 | 8,106 | 92,289 |
| 1987 | 13,583 | 5,850 | 2,717 | 3,332 | 9,019 | 1,865 | 13,745 | 2,046 | 3,912 | 17,096 | 2,101 | 2,551 | 77,817 |
| 1988 | 27,758 | 10,768 | 1,454 | 4,529 | 18,699 | 2,947 | 16,498 | 2,074 | 4,129 | 12,733 | 3,648 | 2,740 | 107,977 |
| 1989 | 23,811 | 5,285 | 6,320 | 4,029 | 13,010 | 3,058 | 16,179 | 767 | 4,592 | 15,218 | 1,907 | 2,688 | 96,864 |
| 1990 | 32,200 | 6,505 | 2,313 | 6,103 | 11,392 | 3,714 | 11,284 | | 4,485 | 18,299 | 3,287 | 2,335 | 101,917 |
| 1991 | 32,520 | 7,792 | 1,981 | 7,816 | 14,872 | 2,811 | 10,745 | 1,056 | 5,788 | 18,466 | 6,172 | 3,159 | 113,178 |
| 1992 | 50,958 | 9,240 | 2,177 | 6,391 | 17,509 | 4,908 | 18,437 | 1,366 | 4,833 | 21,478 | 6,347 | 5,840 | 149,484 |
| 1993 | 41,218 | 6,422 | 1,600 | 5,033 | 12,636 | 3,423 | 21,615 | 655 | 4,094 | 22,580 | 5,161 | 3,945 | 128,382 |
| 1994 | 34,362 | 6,744 | 1,957 | 5,842 | 11,526 | 3,300 | 16,220 | 1,092 | 4,265 | 18,642 | 6,134 | 4,449 | 114,533 |
| 1995 | 29,392 | 6,386 | 1,460 | 3,912 | 9,758 | 1,993 | 16,303 | 826 | 2,756 | 19,358 | 6,019 | 4,523 | 102,686 |
| 1996 | 23,508 | 5,890 | 1,140 | 1,473 | 8,112 | 1,796 | 13,485 | 506 | 3,028 | 18,386 | 2,907 | 2,996 | 83,227 |
| 1997 | 21,511 | 5,829 | 1,916 | 1,317 | 9,172 | 3,151 | 14,111 | 525 | 1,585 | 18,133 | 3,765 | 4,213 | 85,228 |
| 1998 | 23,920 | 4,987 | 1,663 | 2,983 | 9,716 | 2,510 | 14,952 | 1,063 | 2,374 | 16,713 | 5,130 | 3,003 | 89,014 |
| 1999 | 37,384 | 8,596 | 2,004 | 2,764 | 17,188 | 3,561 | 22,382 | 1,226 | 3,805 | 21,988 | 7,299 | 5,113 | 133,310 |
| 2000 | 44,648 | 9,028 | 2,331 | 4,385 | 12,660 | 3,266 | 26,070 | 1,426 | 5,487 | 21,324 | 5,744 | 5,240 | 141,609 |

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Table 3.–Page 2 of 2.

| Year | Willow Creek | Little Willow | Kashwitna River | Caswell Creek | Sheep Creek | Goose Creek | Montana Creek | Birch Creek | Sunshine Creek | Talkeetna River ^a | Other streams ^b | Lakes | Total |
|-----------|--------------|---------------|-----------------|---------------|-------------|-------------|---------------|-------------|----------------|------------------------------|----------------------------|-------|---------|
| 2001 | 34,979 | 7,059 | 2,320 | 2,637 | 11,742 | 2,339 | 22,454 | 1,065 | 1,955 | 21,590 | 8,440 | 4,459 | 121,039 |
| 2002 | 31,997 | 7,189 | 2,648 | 2,562 | 12,853 | 2,845 | 22,008 | 446 | 3,192 | 21,548 | 4,870 | 4,096 | 116,254 |
| 2003 | 29,668 | 4,815 | 5,028 | 3,018 | 12,878 | 2,965 | 20,794 | 666 | 3,616 | 19,335 | 4,387 | 4,891 | 112,061 |
| 2004 | 26,722 | 5,031 | 1,906 | 902 | 10,310 | 2,645 | 22,860 | 881 | 2,820 | 19,632 | 8,161 | 5,819 | 107,689 |
| 2005 | 24,181 | 6,566 | 1,626 | 2,395 | 8,521 | 2,039 | 16,083 | 1,356 | 4,089 | 16,172 | 1,902 | 2,963 | 87,893 |
| 2006 | 21,927 | 4,536 | 2,489 | 1,767 | 9,437 | 2,593 | 19,657 | 779 | 3,732 | 13,043 | 2,800 | 2,269 | 85,029 |
| 2007 | 22,139 | 7,126 | 1,099 | 1,260 | 10,156 | 621 | 18,111 | 414 | 3,098 | 18,025 | 2,947 | 2,181 | 87,177 |
| 2008 | 17,953 | 8,213 | 5,634 | 1,524 | 8,574 | 1,895 | 16,174 | 964 | 4,153 | 14,392 | 2,687 | 3,592 | 85,755 |
| 2009 | 19,019 | 4,105 | 3,897 | 1,859 | 9,248 | 1,640 | 14,084 | 698 | 1,749 | 10,669 | 2,322 | 2,819 | 72,109 |
| 2010 | 12,487 | 3,562 | 1,614 | 2,524 | 7,042 | 1,051 | 10,931 | 1,025 | 2,009 | 11,952 | 3,782 | 5,046 | 63,025 |
| 2011 | 10,949 | 1,282 | 3,444 | 822 | 5,868 | 717 | 8,644 | 578 | 1,314 | 11,212 | 8,530 | 2,761 | 56,121 |
| 2012 | 9,763 | 1,609 | 704 | 546 | 3,877 | 994 | 9,303 | 1,230 | 1,337 | 11,502 | 6,738 | 2,918 | 50,521 |
| Average | | | | | | | | | | | | | |
| 1977–2012 | 24,417 | 5,898 | 2,438 | 3,500 | 10,050 | 2,427 | 17,556 | 1,028 | 3,603 | 14,092 | 4,926 | 5,133 | 92,554 |
| 2003–2012 | 19,481 | 4,685 | 2,744 | 1,662 | 8,591 | 1,716 | 15,664 | 859 | 2,792 | 14,593 | 4,426 | 3,526 | 80,738 |
| 2008–2012 | 14,034 | 3,754 | 3,059 | 1,455 | 6,922 | 1,259 | 11,827 | 899 | 2,112 | 11,945 | 4,812 | 3,427 | 65,506 |
| 2013 | 12,337 | 2,668 | 1,345 | 774 | 5,268 | 674 | 12,089 | 865 | 1,141 | 11,471 | 10,968 | 3,595 | 63,195 |

Source: Mills (1979, 1980, 1981a, 1981b, 1982–1994); Howe et al. (1995, 1996); Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

^a Including Clear Creek.

^b Includes angler days from the Susitna River.

Table 4.—Angler-days of sport fishing effort for the Westside Susitna River Management Unit by fishery, 1977–2013.

| Year | Alex- ander Creek | Deshka River | Rabi- deux Creek | Moose Creek | Yentna River | Peters Creek | Lake Creek | Fish Creek ^a | Tala- chulitna River | Judd Lake | Shell Lake | Whiskey Lake | Hewitt Lake | Other streams ^b | Other lakes ^b | Total |
|------|-------------------------|-----------------|------------------------|----------------|-----------------|-----------------|---------------|----------------------------|----------------------------|--------------|---------------|-----------------|----------------|-------------------------------|-----------------------------|---------|
| 1977 | 5,991 | 3,852 | | | | | 6,946 | | 1,342 | 317 | 566 | 287 | 436 | 7,269 | 2,205 | 29,211 |
| 1978 | 6,914 | 9,111 | | | | | 8,767 | | 732 | 151 | 302 | 129 | 172 | 6,011 | 3,420 | 35,709 |
| 1979 | 8,284 | 13,236 | | | | | 13,881 | | 2,185 | 519 | 263 | 189 | 613 | 7,577 | 1,615 | 48,362 |
| 1980 | 6,812 | 19,364 | | | | | 8,325 | | 2,542 | 814 | 414 | 29 | 471 | 4,998 | 2,999 | 46,768 |
| 1981 | 6,892 | 13,248 | | | | | 6,471 | | 1,378 | | | | | 4,963 | 2,120 | 35,072 |
| 1982 | 10,748 | 18,391 | | | | | 8,649 | | 1,911 | | 444 | 171 | | 7,012 | 3,412 | 50,738 |
| 1983 | 9,425 | 23,174 | | | | | 14,749 | | 4,566 | 155 | 913 | | | 6,284 | 4,653 | 63,919 |
| 1984 | 7,261 | 20,561 | | | | 786 | 14,739 | | 3,848 | 1,255 | | | | 9,652 | 3,161 | 61,263 |
| 1985 | 12,884 | 29,322 | | | | | 14,323 | | 1,682 | | | | | 13,159 | 5,722 | 77,092 |
| 1986 | 19,113 | 29,739 | | 1,193 | | | 15,626 | 3,838 | 2,186 | 963 | | | | 13,753 | 1,325 | 87,736 |
| 1987 | 13,220 | 30,008 | | | | | 16,842 | 6,918 | 3,242 | 2,698 | | | | 9,571 | 1,949 | 84,448 |
| 1988 | 19,591 | 32,160 | | | | 2,001 | 16,007 | 5,784 | 8,040 | 588 | | | | 8,047 | 3,121 | 95,339 |
| 1989 | 14,651 | 39,432 | 550 | 345 | 656 | 914 | 14,061 | 8,035 | 8,698 | 400 | | | | 5,565 | 3,001 | 96,308 |
| 1990 | 19,863 | 32,082 | 1,024 | | 849 | 1,318 | 17,914 | 4,857 | 5,184 | | | | | 5,430 | 3,914 | 92,435 |
| 1991 | 26,235 | 38,011 | 459 | | 1,003 | 2,466 | 14,726 | 3,820 | 6,589 | 544 | | | | 6,560 | 3,659 | 104,072 |
| 1992 | 18,085 | 37,056 | 992 | | 1,985 | 2,198 | 16,869 | 3,873 | 5,153 | | | 800 | | 9,586 | 4,899 | 101,496 |
| 1993 | 21,660 | 30,643 | | | 2,110 | 1,263 | 26,113 | 6,454 | 5,613 | | | | | 10,587 | 2,281 | 106,724 |
| 1994 | 25,608 | 19,267 | | | 3,936 | 1,195 | 27,958 | 7,011 | 7,292 | | | | | 10,113 | 3,732 | 106,112 |
| 1995 | 10,648 | 4,808 | | | 2,728 | 1,465 | 15,808 | 4,729 | 6,354 | | | | | 10,790 | 2,847 | 60,177 |
| 1996 | 6,062 | 5,246 | | | 1,293 | 981 | 12,091 | 2,158 | 5,151 | | | | | 9,735 | | 42,717 |
| 1997 | 7,514 | 5,110 | | | 1,760 | 606 | 16,033 | 3,028 | 5,651 | | | | | 10,664 | | 50,366 |
| 1998 | 6,538 | 11,574 | | | 889 | | 11,260 | 2,618 | 3,224 | | | | | 8,828 | | 44,931 |
| 1999 | 11,187 | 20,088 | | | 3,259 | 536 | 17,991 | 5,107 | 7,680 | | | | | 8,526 | | 74,374 |
| 2000 | 11,733 | 30,997 | | | 5,474 | 1,057 | 21,671 | 3,850 | 6,415 | | | | | 7,306 | | 88,503 |

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Table 4.–Page 2 of 2.

| Year | Alex- ander Creek | Deshka River | Rabi- deux Creek | Moose Creek | Yentna River | Peters Creek | Lake Creek | Fish Creek ^a | Tala- chulitna River | Judd Lake | Shell Lake | Whis- key Lake | Hewitt Lake | Other streams ^b | Other lakes ^b | Total |
|-----------|-------------------------|-----------------|------------------------|----------------|-----------------|-----------------|---------------|----------------------------|----------------------------|--------------|---------------|----------------------|----------------|-------------------------------|-----------------------------|--------|
| 2001 | 9,360 | 23,734 | 417 | | 5,035 | 396 | 20,559 | 4,026 | 5,813 | | | | | 4,429 | 116 | 73,885 |
| 2002 | 10,169 | 20,362 | 737 | | 4,091 | 853 | 14,933 | 3,672 | 3,995 | | | | | 4,010 | 464 | 63,286 |
| 2003 | 6,855 | 24,904 | 520 | | 1,866 | 681 | 19,857 | 3,320 | 4,391 | | | | | 3,614 | 874 | 66,882 |
| 2004 | 5,679 | 28,653 | 894 | 355 | 3,319 | 606 | 20,898 | 3,594 | 3,631 | 344 | 744 | | 110 | 626 | 3,268 | 72,721 |
| 2005 | 3,907 | 26,638 | 365 | 19 | 5,524 | 961 | 21,844 | 3,438 | 4,740 | | 1,082 | | 539 | 3,720 | 1,194 | 73,971 |
| 2006 | 4,337 | 31,015 | 727 | 271 | 6,679 | 620 | 19,801 | 2,084 | 4,455 | 52 | | 53 | 112 | 2,530 | 964 | 73,700 |
| 2007 | 2,666 | 34,659 | 289 | 67 | 5,647 | 1,779 | 13,486 | 981 | 6,704 | 107 | 663 | | 74 | 2,298 | 1,503 | 70,923 |
| 2008 | 299 | 15,514 | 774 | 0 | 4,778 | 756 | 11,891 | 1,212 | 5,310 | 441 | 194 | 0 | 34 | 1,733 | 4,125 | 47,061 |
| 2009 | 2,660 | 10,532 | 586 | 283 | 3,860 | 1,358 | 12,693 | 1,169 | 3,855 | 18 | 200 | 0 | 198 | 1,432 | 4,429 | 43,273 |
| 2010 | 481 | 17,520 | 752 | 347 | 4,693 | 880 | 10,674 | 878 | 3,460 | 140 | 1,432 | 22 | 151 | 3,485 | 3,383 | 48,298 |
| 2011 | 931 | 13,206 | 386 | 122 | 4,511 | 851 | 11,520 | 92 | 2,482 | 105 | 601 | 0 | 50 | 3,669 | 2,131 | 40,657 |
| 2012 | 560 | 10,987 | 641 | 63 | 4,580 | 234 | 9,129 | 1,240 | 4,305 | 73 | 63 | 218 | 146 | 5,681 | 2,335 | 40,255 |
| Average | | | | | | | | | | | | | | | | |
| 1977–2012 | 9,856 | 21,506 | 632 | 279 | 3,355 | 1,070 | 15,142 | 3,622 | 4,439 | 510 | 563 | 100 | 279 | 6,645 | 2,736 | 66,633 |
| 2003–2012 | 2,838 | 21,363 | 593 | 170 | 4,546 | 873 | 15,179 | 1,801 | 4,333 | 160 | 622 | 49 | 157 | 2,879 | 2,421 | 57,774 |
| 2008–2012 | 986 | 13,552 | 628 | 163 | 4,484 | 816 | 11,181 | 918 | 3,882 | 155 | 498 | 48 | 116 | 3,200 | 3,281 | 43,909 |
| 2013 | 1,180 | 9,673 | ^c | 642 | 3,179 | 519 | 13,101 | 752 | 2,945 | 206 | 251 | 581 | 272 | 2,076 | 2,246 | 37,623 |

Source: Mills (1979, 1980, 1981a, 1981b, 1982–1994); Howe et al. (1995, 1996); Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

^a Fish Lake drainage (Yentna River drainage).

^b May include effort from West Cook Inlet drainage waters.

^c No data.

Table 5.—Angler-days of sport fishing effort for the West Cook Inlet Management Unit by fishery, 1977–2013.

| Year | Chuitna River | Beluga River | Theodore River | Lewis River | Kustatan River | Polly Creek | Susitna River-N. Foreland | South of N. Foreland | Big River lakes ^a | Polly Creek, Crescent R. Beach | Other | Total |
|------|---------------|--------------|----------------|-------------|----------------|-------------|---------------------------|----------------------|------------------------------|--------------------------------|-------|--------|
| 1977 | 1,355 | | 1,037 | 343 | | | | | | | | 2,735 |
| 1978 | 1,185 | | 905 | 172 | | | | | | | | 2,262 |
| 1979 | 1,069 | | 912 | 31 | | | | | | | | 2,012 |
| 1980 | 614 | | 700 | 43 | | | | | | | | 1,357 |
| 1981 | 1,364 | | 899 | | | | | | | | | 2,263 |
| 1982 | 751 | | 375 | | | | | | | | | 1,126 |
| 1983 | 4,290 | | 448 | | 1,499 | | | | | | | 6,237 |
| 1984 | 2,342 | | 3,497 | | 1,673 | | | | | | | 7,512 |
| 1985 | 3,381 | | 5,601 | 1,023 | 4,335 | | | | | 2,115 | | 16,455 |
| 1986 | 3,532 | | 4,786 | | 2,737 | | | | | 2,482 | | 13,537 |
| 1987 | 3,169 | | 6,194 | 1,231 | 3,622 | | | | | 2,031 | | 16,247 |
| 1988 | 1,637 | | 4,056 | 837 | 3,674 | | | | | 1,671 | | 11,875 |
| 1989 | 2,666 | 866 | 4,113 | 1,114 | 3,522 | | | 370 | | 962 | 1,238 | 14,851 |
| 1990 | 4,443 | | 3,626 | 1,285 | 3,724 | | | | | 1,314 | | 14,392 |
| 1991 | 2,454 | | 2,841 | 496 | 6,674 | | | | | 871 | | 13,336 |
| 1992 | 2,817 | 512 | 2,091 | | 4,150 | 747 | | | | 683 | | 11,000 |
| 1993 | 2,966 | | 2,528 | 400 | 5,403 | | | 2,379 | 535 | 1,117 | 2,665 | 17,993 |
| 1994 | 2,236 | | 3,492 | | 3,972 | | | 1,283 | 653 | 604 | 3,710 | 15,950 |
| 1995 | 2,205 | | 2,425 | | 3,684 | 688 | | 845 | 659 | 617 | 1,434 | 12,557 |
| 1996 | 2,505 | | 1,811 | | 2,699 | 342 | 1,075 | 855 | 1,251 | 541 | 1,067 | 12,146 |
| 1997 | 2,210 | | 521 | | 2,684 | | 1,738 | 882 | 976 | 572 | 1,635 | 11,218 |
| 1998 | 3,221 | | 280 | | 2,749 | | 1,139 | 862 | 729 | 329 | 710 | 10,019 |
| 1999 | 2,440 | | 488 | | 3,234 | | 2,333 | 2,623 | 1,341 | 677 | 1,266 | 14,402 |
| 2000 | 4,104 | | 1,452 | | 4,393 | | 2,593 | 2,450 | 2,504 | 987 | | 18,483 |

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Table 5.–Part 2 of 2.

| Year | Chuitna River | Beluga River | Theodore River | Lewis River | Kustatan River | Polly Creek | Susitna River-N. Foreland | South of N. Foreland | Big River lakes ^a | Polly Creek, Crescent R. Beach | Other | Total |
|-----------|---------------|--------------|----------------|-------------|----------------|-------------|---------------------------|----------------------|------------------------------|--------------------------------|-------|--------|
| 2001 | 3,580 | | 1,347 | | 3,336 | | 2,027 | 2,615 | 902 | 398 | | 14,205 |
| 2002 | 2,864 | | 1,450 | 237 | 5,254 | | 2,340 | 1,686 | 678 | 499 | 1,327 | 16,335 |
| 2003 | 2,422 | | 618 | 310 | 3,915 | | 945 | 2,517 | 3,497 | 386 | 2,317 | 16,927 |
| 2004 | 2,165 | 777 | 828 | 428 | 2,854 | 233 | 2,135 | 1,482 | 3,322 | 608 | 2,977 | 17,809 |
| 2005 | 2,053 | 233 | 669 | 310 | 2,649 | | 2,423 | 1,194 | 5,365 | 2,000 | 3,563 | 20,459 |
| 2006 | 1,279 | 1040 | 337 | 228 | 2,515 | 78 | 3,155 | 1,955 | 4,957 | | 227 | 15,771 |
| 2007 | 3,745 | 742 | 749 | 238 | 3,517 | 56 | 1,381 | 1,582 | 2,203 | 192 | 5,300 | 19,705 |
| 2008 | 1,805 | 499 | 525 | 222 | 3,416 | 359 | 580 | 1,857 | 2,837 | 201 | 4,326 | 16,627 |
| 2009 | 1,354 | 383 | 952 | 485 | 2,238 | 161 | 2,823 | 1,599 | 3,829 | 446 | 678 | 14,948 |
| 2010 | 441 | 656 | 595 | 340 | 2,152 | 92 | 1,710 | 2,048 | 4,859 | 644 | 975 | 14,512 |
| 2011 | 515 | 364 | 435 | 376 | 1,215 | 30 | 455 | 977 | 2,452 | 126 | 3,239 | 10,184 |
| 2012 | 549 | 349 | 117 | 18 | 1,949 | 44 | 641 | 1,277 | 3,908 | 125 | 1,705 | 10,682 |
| Average | | | | | | | | | | | | |
| 1977–2012 | 2,270 | 584 | 1,769 | 462 | 3,315 | 257 | 1,735 | 1,648 | 2,277 | 859 | 2,124 | 12,170 |
| 2003–2012 | 1,633 | 560 | 583 | 296 | 2,642 | 132 | 1,625 | 1,649 | 3,723 | 525 | 2,531 | 15,762 |
| 2008–2012 | 933 | 450 | 525 | 288 | 2,194 | 137 | 1,242 | 1,552 | 3,577 | 308 | 2,185 | 13,391 |
| 2013 | 369 | 167 | 322 | 54 | 2,485 | 20 | 659 | 3,062 | 2,931 | 186 | 2,145 | 12,400 |

Source: Mills (1979, 1980, 1981a, 1981b, 1982–1994); Howe et al. (1995, 1996); Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

^a Big River lakes encompasses Big River drainage, including Wolverine Creek.

Table 6.–Northern Cook Inlet Management Area sport harvest by management unit, 1977–2013.

| Year | Northern Cook Inlet Management Area | | | | | | | | NCIMA total harvest | Alaska total harvest | NCIMA % of total | Region II total harvest | NCIMA % of total |
|------|-------------------------------------|----|------------------|----|------------------|----|-----------------|---|---------------------------|----------------------------|------------------------|-------------------------------|------------------------|
| | Knik Arm | | Eastside Susitna | | Westside Susitna | | West Cook Inlet | | | | | | |
| | Harvest | % | Harvest | % | Harvest | % | Harvest | % | | | | | |
| 1977 | 67,979 | 43 | 49,274 | 31 | 36,096 | 23 | 3,510 | 2 | 156,859 | 2,300,332 | 7 | 1,929,407 | 8 |
| 1978 | 66,419 | 31 | 96,469 | 46 | 45,208 | 21 | 3,070 | 1 | 211,166 | 2,399,472 | 9 | 1,992,212 | 11 |
| 1979 | 68,658 | 41 | 50,476 | 30 | 46,939 | 28 | 2,453 | 1 | 168,526 | 2,502,213 | 7 | 2,044,813 | 8 |
| 1980 | 102,015 | 41 | 93,271 | 38 | 50,474 | 20 | 1,798 | 1 | 247,558 | 2,627,312 | 9 | 2,118,543 | 12 |
| 1981 | 109,824 | 57 | 46,558 | 24 | 32,153 | 17 | 3,631 | 2 | 192,166 | 2,528,056 | 8 | 2,052,719 | 9 |
| 1982 | 82,976 | 44 | 58,998 | 31 | 46,189 | 24 | 1,814 | 1 | 189,977 | 2,828,706 | 7 | 2,222,354 | 9 |
| 1983 | 92,689 | 50 | 45,330 | 24 | 41,855 | 23 | 5,596 | 3 | 185,470 | 3,086,280 | 6 | 2,409,876 | 8 |
| 1984 | 94,974 | 45 | 62,071 | 29 | 48,947 | 23 | 6,145 | 3 | 212,137 | 3,115,966 | 7 | 2,517,185 | 8 |
| 1985 | 104,136 | 51 | 39,684 | 20 | 47,868 | 24 | 10,853 | 5 | 202,541 | 3,096,044 | 7 | 2,469,836 | 8 |
| 1986 | 90,264 | 39 | 73,083 | 32 | 59,300 | 26 | 8,031 | 3 | 230,678 | 3,163,433 | 7 | 2,609,304 | 9 |
| 1987 | 98,373 | 46 | 47,548 | 22 | 57,252 | 27 | 11,400 | 5 | 214,573 | 3,207,138 | 7 | 2,584,420 | 8 |
| 1988 | 156,784 | 53 | 62,693 | 21 | 67,567 | 23 | 10,954 | 4 | 297,998 | 3,483,306 | 9 | 2,841,033 | 10 |
| 1989 | 115,070 | 49 | 51,426 | 22 | 55,361 | 24 | 11,592 | 5 | 233,449 | 3,213,867 | 7 | 2,519,404 | 9 |
| 1990 | 90,035 | 46 | 44,360 | 23 | 52,846 | 27 | 9,713 | 5 | 196,954 | 3,033,301 | 6 | 2,428,172 | 8 |
| 1991 | 103,384 | 44 | 51,068 | 22 | 66,514 | 29 | 11,492 | 5 | 232,458 | 3,311,513 | 7 | 2,633,148 | 9 |
| 1992 | 88,267 | 37 | 76,569 | 32 | 62,768 | 26 | 9,275 | 4 | 236,879 | 3,234,048 | 7 | 2,675,940 | 9 |
| 1993 | 90,017 | 39 | 67,907 | 30 | 55,215 | 24 | 15,384 | 7 | 228,523 | 2,989,720 | 8 | 2,387,224 | 10 |
| 1994 | 87,547 | 44 | 51,984 | 26 | 47,891 | 24 | 13,583 | 7 | 201,005 | 3,349,821 | 6 | 2,689,718 | 7 |
| 1995 | 57,182 | 39 | 42,845 | 29 | 37,688 | 25 | 10,741 | 7 | 148,456 | 2,909,979 | 5 | 2,396,666 | 6 |
| 1996 | 88,461 | 45 | 53,672 | 27 | 35,940 | 18 | 17,522 | 9 | 195,595 | 3,336,773 | 6 | 2,733,663 | 7 |
| 1997 | 69,199 | 45 | 37,909 | 24 | 36,110 | 23 | 11,755 | 8 | 154,973 | 3,294,273 | 5 | 2,643,988 | 6 |
| 1998 | 64,060 | 38 | 51,514 | 30 | 40,329 | 24 | 14,604 | 9 | 170,507 | 3,163,194 | 5 | 2,365,536 | 7 |
| 1999 | 70,384 | 32 | 66,153 | 30 | 70,806 | 32 | 15,120 | 7 | 222,463 | 3,093,608 | 7 | 2,163,862 | 10 |
| 2000 | 102,831 | 40 | 75,496 | 29 | 61,252 | 24 | 19,202 | 7 | 258,781 | 3,338,071 | 8 | 2,547,294 | 10 |

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Table 6.–Page 2 of 2.

| Year | Northern Cook Inlet Management Area | | | | | | | | NCIMA total harvest | Alaska total harvest | NCIMA % of Alaska total | Region II total harvest | NCIMA % of Region II total |
|-----------|-------------------------------------|----|------------------|----|------------------|----|--------------------|----|------------------------|----------------------------|----------------------------------|-------------------------------|-------------------------------------|
| | Knik Arm | | Eastside Susitna | | Westside Susitna | | West Cook Inlet | | | | | | |
| | Harvest | % | Harvest | % | Harvest | % | Harvest | % | | | | | |
| 2001 | 79,920 | 37 | 59,205 | 27 | 57,173 | 26 | 19,582 | 9 | 215,880 | 3,078,100 | 7 | 2,228,839 | 10 |
| 2002 | 102,112 | 48 | 53,912 | 25 | 40,031 | 19 | 17,752 | 8 | 213,807 | 3,216,432 | 7 | 2,401,826 | 9 |
| 2003 | 68,332 | 37 | 41,764 | 23 | 52,462 | 29 | 21,416 | 12 | 183,974 | 3,052,136 | 6 | 2,177,555 | 8 |
| 2004 | 77,563 | 38 | 42,991 | 21 | 61,552 | 30 | 21,884 | 11 | 203,990 | 3,332,948 | 6 | 2,350,240 | 9 |
| 2005 | 67,036 | 40 | 35,066 | 21 | 49,444 | 29 | 17,936 | 11 | 169,482 | 3,235,176 | 5 | 2,173,207 | 8 |
| 2006 | 77,054 | 42 | 40,043 | 22 | 45,933 | 25 | 18,662 | 10 | 181,692 | 2,709,406 | 7 | 1,942,870 | 9 |
| 2007 | 60,293 | 40 | 30,763 | 21 | 35,021 | 23 | 23,537 | 16 | 149,614 | 3,032,493 | 5 | 2,123,212 | 7 |
| 2008 | 69,881 | 42 | 40,009 | 24 | 32,918 | 20 | 21,827 | 13 | 164,635 | 2,976,610 | 6 | 2,169,154 | 8 |
| 2009 | 63,310 | 45 | 34,813 | 25 | 27,325 | 19 | 16,304 | 12 | 141,752 | 2,951,263 | 5 | 2,139,793 | 7 |
| 2010 | 53,326 | 40 | 27,957 | 21 | 34,140 | 26 | 16,249 | 12 | 131,672 | 2,566,595 | 5 | 1,900,591 | 7 |
| 2011 | 32,385 | 33 | 22,198 | 23 | 32,589 | 33 | 10,989 | 11 | 98,161 | 2,677,077 | 4 | 1,979,899 | 5 |
| 2012 | 24,480 | 32 | 17,464 | 23 | 22,121 | 29 | 13,263 | 17 | 77,328 | 2,470,395 | 3 | 1,771,727 | 4 |
| Average | | | | | | | | | | | | | |
| 1977–2012 | 81,589 | 42 | 51,182 | 27 | 47,035 | 24 | 12,462 | 6 | 192,269 | 3,012,419 | 6 | 2,330,386 | 8 |
| 2008–2012 | 64,773 | 42 | 34,717 | 23 | 35,067 | 23 | 19,316 | 13 | 122,710 | 2,728,388 | 4 | 1,992,233 | 6 |
| 2013 | 37,650 | 34 | 25,630 | 23 | 32,577 | 30 | 13,281 | 12 | 109,138 | 2,941,908 | 4 | 1,972,619 | 6 |

Source: Mills (1979, 1980, 1981a, 1981b, 1982–1994); Howe et al. (1995, 1996); Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Table 7.—Northern Cook Inlet Management Area sport fish harvest by species, 1977–2013.

| Year | Chi-nook salmon | Coho salmon | Sock-eye salmon | Pink salmon | Chum salmon | Land-locked salmon | Rain-bow trout | Dolly Varden | Arctic gray-ling | Lake trout | Burbot | Northern pike | White-fish | Smelt | Other | Total |
|------|-----------------|-------------|-----------------|-------------|-------------|--------------------|----------------|--------------|------------------|------------|--------|---------------|------------|--------|-------|---------|
| 1977 | 4,674 | 17,206 | 7,962 | 30,136 | 2,062 | 27,429 | 32,270 | 13,365 | 15,799 | 3,231 | 1,024 | 132 | 0 | 0 | 1,569 | 156,859 |
| 1978 | 3,543 | 27,019 | 3,140 | 58,808 | 17,969 | 21,252 | 42,087 | 17,130 | 15,728 | 1,980 | 876 | 316 | 0 | 0 | 1,318 | 211,166 |
| 1979 | 7,964 | 24,076 | 6,193 | 13,925 | 5,599 | 12,144 | 47,924 | 17,718 | 27,949 | 1,789 | 1,172 | 382 | 0 | 0 | 1,691 | 168,526 |
| 1980 | 8,198 | 39,167 | 7,658 | 61,985 | 5,577 | 21,163 | 49,428 | 18,255 | 29,720 | 2,833 | 1,383 | 232 | 0 | 0 | 1,959 | 247,558 |
| 1981 | 8,602 | 23,621 | 8,369 | 9,627 | 4,820 | 24,533 | 63,592 | 20,310 | 24,506 | 2,375 | 518 | 125 | 0 | 0 | 1,168 | 192,166 |
| 1982 | 12,449 | 35,246 | 9,067 | 19,045 | 8,111 | 11,841 | 49,948 | 19,723 | 19,196 | 1,560 | 1,656 | 607 | 0 | 0 | 1,528 | 189,977 |
| 1983 | 14,860 | 17,477 | 21,533 | 5,686 | 6,032 | 23,854 | 46,184 | 20,362 | 21,332 | 3,532 | 2,305 | 944 | 0 | 0 | 1,369 | 185,470 |
| 1984 | 20,424 | 49,537 | 15,609 | 14,763 | 8,115 | 15,428 | 42,901 | 14,440 | 21,148 | 2,843 | 2,778 | 1,821 | 1,058 | 0 | 1,272 | 212,137 |
| 1985 | 21,904 | 38,971 | 9,840 | 4,018 | 3,053 | 15,345 | 63,319 | 18,626 | 18,554 | 622 | 1,855 | 1,404 | 2,477 | 2,240 | 313 | 202,541 |
| 1986 | 25,873 | 45,890 | 14,203 | 15,992 | 9,354 | 16,405 | 42,642 | 20,268 | 20,109 | 2,286 | 2,899 | 1,977 | 2,105 | 10,651 | 24 | 230,678 |
| 1987 | 25,906 | 54,109 | 13,530 | 4,634 | 6,358 | 15,032 | 39,909 | 16,421 | 16,405 | 2,046 | 5,140 | 2,464 | 2,861 | 9,265 | 493 | 214,573 |
| 1988 | 29,720 | 83,241 | 14,573 | 8,693 | 13,408 | 17,207 | 74,962 | 17,645 | 18,735 | 2,529 | 1,835 | 3,473 | 3,128 | 8,849 | 0 | 297,998 |
| 1989 | 35,792 | 66,833 | 14,403 | 5,191 | 9,043 | 11,577 | 54,962 | 12,860 | 12,238 | 2,397 | 978 | 3,120 | 1,716 | 2,324 | 15 | 233,449 |
| 1990 | 30,967 | 50,404 | 11,839 | 6,005 | 2,557 | 16,101 | 40,139 | 13,792 | 8,187 | 1,656 | 3,141 | 2,842 | 3,516 | 5,591 | 217 | 196,954 |
| 1991 | 33,958 | 70,425 | 11,713 | 3,495 | 3,240 | 15,754 | 52,513 | 13,859 | 10,084 | 1,527 | 981 | 6,640 | 2,057 | 6,132 | 80 | 232,458 |
| 1992 | 45,226 | 82,859 | 11,921 | 8,225 | 2,858 | 11,961 | 34,161 | 7,496 | 6,385 | 1,698 | 1,412 | 5,382 | 862 | 15,523 | 910 | 236,879 |
| 1993 | 49,387 | 87,606 | 14,579 | 4,827 | 2,536 | 14,567 | 27,950 | 5,978 | 5,175 | 765 | 1,655 | 5,721 | 878 | 6,596 | 303 | 228,523 |
| 1994 | 31,104 | 73,017 | 12,479 | 3,878 | 2,937 | 14,198 | 28,855 | 5,163 | 8,044 | 411 | 2,276 | 3,893 | 1,193 | 13,135 | 422 | 201,005 |
| 1995 | 16,537 | 65,145 | 11,441 | 3,081 | 7,967 | 7,318 | 19,884 | 4,167 | 3,199 | 456 | 858 | 3,546 | 227 | 4,549 | 81 | 148,456 |
| 1996 | 19,839 | 77,853 | 11,048 | 5,430 | 4,841 | 23,350 | 26,653 | 9,096 | 5,724 | 471 | 898 | 7,934 | 176 | 2,181 | 101 | 195,595 |
| 1997 | 22,620 | 35,685 | 15,229 | 3,620 | 4,267 | 11,721 | 30,089 | 6,594 | 4,425 | 520 | 1,874 | 9,024 | 214 | 8,853 | 238 | 154,973 |
| 1998 | 22,912 | 68,231 | 16,343 | 7,889 | 3,451 | 5,377 | 19,931 | 3,736 | 3,752 | 338 | 1,358 | 8,180 | 566 | 8,376 | 67 | 170,507 |
| 1999 | 32,803 | 65,055 | 16,535 | 3,819 | 4,222 | 9,377 | 28,425 | 5,906 | 4,135 | 402 | 1,271 | 10,824 | 134 | 39,555 | 0 | 222,463 |
| 2000 | 33,102 | 105,252 | 23,235 | 14,627 | 5,166 | 12,064 | 31,703 | 6,116 | 2,923 | 385 | 2,177 | 9,577 | 311 | 11,827 | 316 | 258,781 |

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Table 7.–Page 2 of 2.

| Year | Chi-nook salmon | Coho salmon | Sockeye salmon | Pink salmon | Chum salmon | Land-locked salmon | Rain-bow trout | Dolly Varden | Arctic gray-ling | Lake trout | Bur-bot | Northern pike | White-fish | Smelt | Other | Total |
|--------------|-----------------|-------------|----------------|-------------|-------------|--------------------|----------------|--------------|------------------|------------|---------|---------------|------------|--------|-------|---------|
| 2001 | 30,395 | 89,893 | 20,565 | 5,229 | 5,026 | 7,556 | 23,202 | 4,560 | 2,864 | 439 | 689 | 12,739 | 797 | 11,630 | 296 | 215,880 |
| 2002 | 26,474 | 99,155 | 11,946 | 5,177 | 5,461 | 9,137 | 31,521 | 4,150 | 2,532 | 643 | 1,371 | 12,318 | 331 | 3,298 | 293 | 213,807 |
| 2003 | 28,220 | 73,479 | 22,708 | 2,276 | 4,402 | 5,905 | 21,887 | 4,375 | 1,942 | 858 | 1,346 | 8,024 | 283 | 7,498 | 771 | 183,974 |
| 2004 | 27,543 | 88,746 | 16,936 | 6,629 | 3,959 | 5,940 | 21,468 | 3,965 | 2,148 | 734 | 729 | 12,171 | 327 | 12,573 | 122 | 203,990 |
| 2005 | 28,682 | 75,309 | 11,381 | 3,460 | 3,364 | 6,685 | 15,695 | 2,999 | 1,119 | 404 | 1,357 | 11,306 | 807 | 3,068 | 3,846 | 169,482 |
| 2006 | 28,644 | 95,086 | 11,653 | 5,009 | 2,227 | 3,688 | 16,311 | 2,486 | 2,134 | 157 | 1,082 | 11,404 | 330 | 71 | 1,410 | 181,692 |
| 2007 | 25,413 | 67,842 | 19,864 | 3,069 | 1,749 | 1,754 | 12,288 | 4,927 | 1,756 | 643 | 911 | 8,156 | 449 | 744 | 49 | 149,614 |
| 2008 | 15,919 | 90,006 | 16,750 | 2,499 | 2,233 | 2,198 | 17,908 | 3,030 | 1,571 | 453 | 1,715 | 7,999 | 364 | 1,832 | 158 | 164,635 |
| 2009 | 11,156 | 76,871 | 19,712 | 5,942 | 2,557 | 1,321 | 9,547 | 2,467 | 2,124 | 244 | 303 | 8,488 | 66 | 880 | 74 | 141,752 |
| 2010 | 10,510 | 65,935 | 16,281 | 3,142 | 2,460 | 2,084 | 13,194 | 2,570 | 1,958 | 316 | 658 | 9,913 | 141 | 2,510 | 0 | 131,672 |
| 2011 | 9,712 | 36,299 | 13,873 | 2,015 | 2,880 | 842 | 10,729 | 1,989 | 804 | 564 | 308 | 11,089 | 112 | 6,763 | 182 | 98,161 |
| 2012 | 3,020 | 29,890 | 13,046 | 1,880 | 3,178 | 2,835 | 9,198 | 1,445 | 729 | 173 | 454 | 7,815 | 83 | 3,290 | 292 | 77,328 |
| Average | | | | | | | | | | | | | | | | |
| 1977–2012 | 22,335 | 60,901 | 13,810 | 10,104 | 5,084 | 11,804 | 33,149 | 9,666 | 9,587 | 1,230 | 1,479 | 5,888 | 766 | 5,828 | 637 | 192,269 |
| 2008–2012 | 10,063 | 59,800 | 15,932 | 3,096 | 2,662 | 1,856 | 12,115 | 2,300 | 1,437 | 350 | 688 | 9,061 | 153 | 3,055 | 141 | 122,710 |
| % of average | | | | | | | | | | | | | | | | |
| 1977–2012 | 12 | 32 | 7 | 5 | 3 | 6 | 17 | 5 | 5 | 1 | 1 | 3 | <1 | 3 | <1 | 100 |
| 2013 | 2,940 | 46,064 | 17,112 | 3,391 | 1,979 | 1,850 | 10,911 | 2,142 | 1,502 | 199 | 580 | 18,764 | 0 | 1,704 | 0 | 109,138 |

Source: Mills (1979, 1980, 1981a, 1981b, 1982–1994); Howe et al. (1995, 1996); Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Table 8.—Knik Arm Management Unit sport fish harvest by species as estimated by SWHS, 1977–2013.

| Year | Chi-nook salmon | Coho salmon | Sock-eye salmon | Pink salmon | Chum salmon | Land-locked salmon | Rain-bow trout | Dolly Varden | Arctic gray-ling | Lake trout | Burbot | Northern pike | White-fish | Smelt | Other | Total |
|------|-----------------|-------------|-----------------|-------------|-------------|--------------------|----------------|--------------|------------------|------------|--------|---------------|------------|-------|-------|---------|
| 1977 | 207 | 4,366 | 1,576 | 1,661 | 250 | 26,917 | 18,615 | 7,541 | 3,916 | 2,260 | 290 | | | | 380 | 67,979 |
| 1978 | 140 | 7,895 | 1,239 | 1,842 | 1,131 | 18,884 | 23,139 | 7,982 | 2,413 | 507 | 452 | | | | 795 | 66,419 |
| 1979 | 800 | 7,139 | 3,616 | 818 | 654 | 11,853 | 24,843 | 8,582 | 8,371 | 1,254 | 291 | | | | 437 | 68,658 |
| 1980 | 646 | 16,030 | 5,674 | 4,701 | 534 | 19,500 | 29,368 | 12,484 | 9,514 | 2,118 | 310 | | | | 1,136 | 102,015 |
| 1981 | 1,466 | 10,484 | 6,080 | 834 | 431 | 24,255 | 41,749 | 14,475 | 7,396 | 1,791 | 87 | | | | 776 | 109,824 |
| 1982 | 1,666 | 13,676 | 4,621 | 1,425 | 1,174 | 10,845 | 30,549 | 13,540 | 2,924 | 1,058 | 681 | | | | 817 | 82,976 |
| 1983 | 1,255 | 6,139 | 14,297 | 1,009 | 642 | 22,805 | 26,421 | 13,391 | 4,425 | 1,279 | 597 | | | | 429 | 92,689 |
| 1984 | 2,057 | 23,429 | 9,240 | 2,743 | 2,032 | 14,768 | 26,418 | 9,103 | 2,480 | 1,919 | 336 | | | | 449 | 94,974 |
| 1985 | 1,889 | 14,339 | 5,612 | 787 | 514 | 14,461 | 46,431 | 13,336 | 4,768 | 277 | 210 | 156 | 587 | 560 | 209 | 104,136 |
| 1986 | 1,524 | 12,361 | 6,009 | 1,800 | 3,770 | 14,299 | 27,690 | 13,048 | 4,233 | 313 | 804 | 458 | 580 | 3,351 | 24 | 90,264 |
| 1987 | 2,476 | 25,787 | 8,785 | 886 | 2,574 | 14,887 | 24,663 | 11,425 | 3,893 | 906 | 325 | 924 | 380 | 0 | 462 | 98,373 |
| 1988 | 2,916 | 40,037 | 8,076 | 1,927 | 5,221 | 16,588 | 58,609 | 11,314 | 8,367 | 1,911 | 291 | 364 | 1,163 | 0 | 0 | 156,784 |
| 1989 | 4,341 | 23,846 | 9,040 | 1,321 | 4,477 | 11,041 | 44,518 | 8,143 | 5,429 | 835 | 372 | 863 | 844 | 0 | 0 | 115,070 |
| 1990 | 2,022 | 18,762 | 6,588 | 650 | 746 | 15,950 | 30,699 | 8,746 | 3,068 | 1,067 | 262 | 754 | 622 | 0 | 99 | 90,035 |
| 1991 | 2,277 | 22,186 | 4,968 | 926 | 1,099 | 15,740 | 39,636 | 9,138 | 2,816 | 512 | 477 | 2,709 | 900 | 0 | 0 | 103,384 |
| 1992 | 3,969 | 25,814 | 5,349 | 1,044 | 510 | 11,875 | 27,995 | 4,186 | 2,511 | 840 | 500 | 2,605 | 257 | 0 | 812 | 88,267 |
| 1993 | 3,602 | 35,763 | 5,926 | 230 | 885 | 13,829 | 21,565 | 3,686 | 1,343 | 201 | 482 | 2,102 | 227 | 0 | 176 | 90,017 |
| 1994 | 4,303 | 28,539 | 5,082 | 635 | 1,356 | 14,153 | 22,446 | 3,532 | 2,898 | 66 | 512 | 1,328 | 242 | 2,292 | 163 | 87,547 |
| 1995 | 1,707 | 20,650 | 4,349 | 409 | 4,115 | 7,285 | 14,878 | 2,109 | 818 | 118 | 151 | 522 | 71 | 0 | 0 | 57,182 |
| 1996 | 1,579 | 24,874 | 4,307 | 961 | 1,681 | 21,364 | 21,780 | 5,606 | 1,940 | 76 | 218 | 4,021 | 16 | 0 | 38 | 88,461 |
| 1997 | 2,938 | 11,773 | 4,095 | 377 | 393 | 11,599 | 25,695 | 4,639 | 1,938 | 20 | 709 | 4,858 | 96 | 0 | 69 | 69,199 |
| 1998 | 2,031 | 23,750 | 5,499 | 646 | 797 | 5,057 | 17,693 | 2,425 | 1,300 | 68 | 121 | 4,272 | 356 | 0 | 45 | 64,060 |
| 1999 | 2,724 | 14,429 | 3,658 | 119 | 738 | 8,674 | 24,527 | 3,798 | 1,740 | 108 | 369 | 6,785 | 7 | 2,708 | 0 | 70,384 |
| 2000 | 2,824 | 32,530 | 7,536 | 954 | 1,254 | 11,233 | 28,745 | 3,393 | 1,194 | 116 | 805 | 5,698 | 113 | 6,131 | 305 | 102,831 |

-continued-

Table 8.–Page 2 of 2.

| Year | Chi-nook salmon | Coho salmon | Sock-eye salmon | Pink salmon | Chum salmon | Land-locked salmon | Rain-bow trout | Dolly Varden | Arctic gray-ling | Lake trout | Bur-bot | Northern pike | White-fish | Smelt | Other | Total |
|--------------|-----------------|-------------|-----------------|-------------|-------------|--------------------|----------------|--------------|------------------|------------|---------|---------------|------------|-------|-------|---------|
| 2001 | 2,255 | 30,106 | 4,328 | 404 | 1,155 | 7,556 | 21,061 | 2,662 | 1,215 | 162 | 230 | 6,544 | 551 | 1,574 | 117 | 79,920 |
| 2002 | 3,195 | 44,448 | 4,619 | 466 | 1,685 | 9,137 | 28,325 | 1,822 | 881 | 533 | 1,069 | 5,716 | 190 | 0 | 26 | 102,112 |
| 2003 | 2,562 | 24,583 | 6,606 | 52 | 1,124 | 5,800 | 17,617 | 2,247 | 1,222 | 339 | 438 | 4,026 | 108 | 1,578 | 30 | 68,332 |
| 2004 | 2,556 | 34,298 | 7,148 | 859 | 808 | 5,915 | 17,738 | 2,380 | 703 | 0 | 171 | 4,961 | 15 | 11 | 0 | 77,563 |
| 2005 | 3,692 | 27,000 | 3,460 | 270 | 747 | 6,685 | 14,367 | 2,040 | 507 | 220 | 805 | 6,160 | 710 | 0 | 373 | 67,036 |
| 2006 | 3,813 | 39,953 | 4,622 | 698 | 780 | 3,680 | 13,524 | 1,525 | 972 | 40 | 550 | 6,664 | 162 | 71 | 0 | 77,054 |
| 2007 | 4,326 | 27,733 | 7,030 | 287 | 364 | 1,654 | 10,613 | 4,063 | 605 | 127 | 240 | 3,050 | 43 | 124 | 34 | 60,293 |
| 2008 | 2,843 | 35,996 | 6,695 | 304 | 620 | 2,198 | 15,537 | 1,935 | 744 | 300 | 926 | 1,752 | 31 | 0 | 0 | 69,881 |
| 2009 | 2,152 | 37,271 | 5,963 | 370 | 732 | 793 | 7,981 | 1,842 | 1,455 | 71 | 17 | 4,647 | 16 | 0 | 0 | 63,310 |
| 2010 | 1,076 | 26,369 | 5,630 | 919 | 528 | 2,008 | 10,845 | 1,612 | 687 | 100 | 163 | 3,372 | 17 | 0 | 0 | 53,326 |
| 2011 | 1,012 | 8,484 | 3,589 | 294 | 659 | 740 | 9,368 | 1,593 | 439 | 0 | 132 | 5,963 | 112 | 0 | 0 | 32,385 |
| 2012 | 292 | 5,014 | 2,685 | 166 | 782 | 2,730 | 8,294 | 928 | 277 | 48 | 33 | 3,231 | 0 | 0 | 0 | 24,480 |
| Average | | | | | | | | | | | | | | | | |
| 1977–2012 | 2,254 | 22,385 | 5,655 | 939 | 1,305 | 11,299 | 24,276 | 6,119 | 2,761 | 599 | 401 | 3,375 | 301 | 657 | 228 | 82,552 |
| 2008–2012 | 1,475 | 22,627 | 4,912 | 411 | 664 | 1,694 | 10,405 | 1,582 | 720 | 104 | 254 | 3,793 | 35 | 0 | 0 | 48,676 |
| % of average | | | | | | | | | | | | | | | | |
| 1977–2012 | 3 | 27 | 7 | 1 | 2 | 14 | 29 | 7 | 3 | 1 | <1 | 4 | <1 | 1 | <1 | 100 |
| 2013 | 495 | 12,335 | 2,749 | 180 | 302 | 1,822 | 9,195 | 1,028 | 180 | 0 | 26 | 9,338 | 0 | 0 | 0 | 37,650 |

Source: Mills (1979, 1980, 1981a, 1981b, 1982–1994); Howe et al. (1995, 1996); Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Table 9.—Eastside Susitna River Management Unit sport fish harvest by species, 1977–2013.

| Year | Chi-nook salmon | Coho salmon | Sock-eye salmon | Pink salmon | Chum salmon | Land-locked salmon | Rain-bow trout | Dolly Varden | Arctic gray-ling | Lake trout | Burbot | White-fish | Northern pike | Smelt | Other | Total |
|------|-----------------|-------------|-----------------|-------------|-------------|--------------------|----------------|--------------|------------------|------------|--------|------------|---------------|-------|-------|--------|
| 1977 | 1,056 | 5,709 | 3,594 | 19,663 | 1,382 | 512 | 5,225 | 2,726 | 7,469 | 693 | 619 | | | | 626 | 49,274 |
| 1978 | 886 | 8,573 | 267 | 50,711 | 14,203 | 2,368 | 5,930 | 5,640 | 6,590 | 877 | 271 | | | | 153 | 96,469 |
| 1979 | 1,298 | 7,564 | 1,020 | 11,189 | 3,791 | 291 | 9,463 | 3,699 | 10,489 | 472 | 427 | | | | 773 | 50,476 |
| 1980 | 1,370 | 10,368 | 873 | 52,746 | 4,552 | 1,663 | 6,715 | 2,671 | 10,959 | 267 | 367 | | | | 720 | 93,271 |
| 1981 | 2,202 | 6,593 | 833 | 8,143 | 4,149 | 278 | 8,813 | 2,874 | 11,860 | 287 | 220 | | | | 306 | 46,558 |
| 1982 | 2,063 | 10,167 | 1,555 | 15,345 | 6,644 | 996 | 7,536 | 4,066 | 9,747 | 335 | 199 | | | | 345 | 58,998 |
| 1983 | 2,852 | 5,176 | 3,221 | 3,954 | 4,982 | 1,049 | 9,639 | 4,205 | 7,478 | 1,404 | 901 | | | | 469 | 45,330 |
| 1984 | 4,428 | 13,916 | 2,705 | 9,491 | 5,211 | 660 | 7,656 | 4,004 | 11,222 | 362 | 1,133 | 1,058 | | | 225 | 62,071 |
| 1985 | 4,342 | 7,042 | 1,465 | 2,510 | 2,142 | 884 | 7,872 | 3,138 | 7,822 | 17 | 1,085 | 1,365 | | | 0 | 39,684 |
| 1986 | 8,569 | 16,190 | 4,029 | 10,527 | 4,756 | 2,106 | 8,061 | 4,213 | 10,346 | 1,816 | 1,380 | 1,090 | | | 0 | 73,083 |
| 1987 | 8,603 | 11,028 | 2,046 | 2,209 | 3,042 | 145 | 6,647 | 3,946 | 7,568 | 343 | 1,175 | 796 | | | 0 | 47,548 |
| 1988 | 9,139 | 19,518 | 2,857 | 4,129 | 6,604 | 619 | 7,622 | 4,748 | 6,020 | 291 | 600 | 546 | | | 0 | 62,693 |
| 1989 | 9,783 | 17,078 | 2,527 | 2,715 | 4,151 | 536 | 4,972 | 3,040 | 4,562 | 1,210 | 395 | 442 | | | 15 | 51,426 |
| 1990 | 9,423 | 11,743 | 2,677 | 4,093 | 1,565 | 151 | 5,008 | 3,613 | 2,910 | 387 | 1,345 | 1,378 | | | 67 | 44,360 |
| 1991 | 9,083 | 19,479 | 2,897 | 2,001 | 1,950 | 14 | 7,854 | 2,140 | 3,875 | 726 | 407 | 626 | | | 16 | 51,068 |
| 1992 | 21,307 | 33,790 | 3,468 | 5,899 | 2,044 | 86 | 3,948 | 2,394 | 2,189 | 495 | 608 | 265 | | | 76 | 76,569 |
| 1993 | 22,688 | 26,063 | 4,137 | 3,941 | 1,480 | 738 | 3,713 | 1,413 | 2,401 | 288 | 909 | 87 | 0 | | 49 | 67,907 |
| 1994 | 14,970 | 20,870 | 3,443 | 1,968 | 1,269 | 45 | 3,658 | 1,033 | 3,484 | 232 | 674 | 172 | 0 | | 166 | 51,984 |
| 1995 | 7,872 | 19,165 | 3,682 | 2,311 | 3,234 | 33 | 3,138 | 1,012 | 1,486 | 254 | 517 | 80 | 0 | | 61 | 42,845 |
| 1996 | 11,023 | 24,174 | 2,675 | 3,890 | 2,808 | 1,986 | 2,510 | 2,027 | 1,913 | 308 | 284 | 0 | 11 | | 63 | 53,672 |
| 1997 | 10,989 | 10,297 | 5,851 | 2,477 | 2,852 | 122 | 2,324 | 906 | 1,387 | 189 | 304 | 32 | 95 | | 84 | 37,909 |
| 1998 | 10,472 | 23,086 | 5,859 | 5,579 | 2,260 | 320 | 968 | 889 | 1,413 | 217 | 208 | 96 | 130 | | 17 | 51,514 |
| 1999 | 16,875 | 23,292 | 4,608 | 2,887 | 2,941 | 703 | 1,755 | 918 | 1,614 | 222 | 230 | 32 | 260 | 9,816 | 0 | 66,153 |
| 2000 | 11,774 | 37,748 | 6,509 | 11,483 | 3,279 | 831 | 1,521 | 823 | 979 | 154 | 242 | 52 | 101 | 0 | 0 | 75,496 |

Table 9.–Page 2 of 2.

| Year | Chi-nook salmon | Coho salmon | Sock-eye salmon | Pink salmon | Chum salmon | Land-locked salmon | Rain-bow trout | Dolly Varden | Arctic gray-ling | Lake trout | Bur-bot | White-fish | Northern pike | Smelt | Other | Total |
|-------------------|-----------------|-------------|-----------------|-------------|-------------|--------------------|----------------|--------------|------------------|------------|---------|------------|---------------|-------|-------|--------|
| 2001 | 13,504 | 26,617 | 6,776 | 3,650 | 3,180 | 0 | 1,112 | 1,172 | 1,036 | 226 | 214 | 135 | 55 | 1,349 | 179 | 59,205 |
| 2002 | 10,695 | 27,183 | 3,427 | 3,760 | 3,389 | 0 | 1,751 | 1,512 | 1,165 | 103 | 211 | 67 | 618 | 0 | 31 | 53,912 |
| 2003 | 9,499 | 18,585 | 2,734 | 1,775 | 2,725 | 105 | 2,581 | 1,694 | 393 | 339 | 511 | 82 | 0 | 0 | 741 | 41,764 |
| 2004 | 8,498 | 20,484 | 3,107 | 3,321 | 2,547 | 25 | 1,924 | 1,093 | 975 | 594 | 238 | 94 | 91 | 0 | 0 | 42,991 |
| 2005 | 8,453 | 17,471 | 1,677 | 2,625 | 2,506 | 0 | 793 | 482 | 404 | 32 | 260 | 0 | 104 | 0 | 259 | 35,066 |
| 2006 | 7,339 | 22,719 | 1,412 | 3,918 | 1,321 | 8 | 1,590 | 619 | 427 | 111 | 406 | 0 | 137 | 0 | 36 | 40,043 |
| 2007 | 8,337 | 13,464 | 1,470 | 2,165 | 1,204 | 100 | 840 | 253 | 779 | 296 | 321 | 164 | 1,355 | 0 | 15 | 30,763 |
| 2008 | 5,834 | 24,211 | 2,975 | 1,985 | 1,229 | 0 | 1,521 | 359 | 421 | 98 | 533 | 244 | 468 | 0 | 131 | 40,009 |
| 2009 | 3,462 | 15,335 | 7,130 | 4,657 | 1,531 | 528 | 691 | 282 | 487 | 125 | 200 | 0 | 385 | 0 | 0 | 34,813 |
| 2010 | 2,274 | 14,291 | 3,914 | 1,455 | 1,399 | 76 | 1,826 | 592 | 546 | 84 | 440 | 27 | 1,033 | 0 | 0 | 27,957 |
| 2011 ^a | 2,710 | 9,040 | 2,459 | 1,572 | 2,167 | 102 | 977 | 239 | 211 | 516 | 60 | 0 | 2,138 | 0 | 7 | 22,198 |
| 2012 | 203 | 7,629 | 4,277 | 1,367 | 2,214 | 105 | 623 | 95 | 277 | 103 | 217 | 0 | 79 | 0 | 275 | 17,464 |
| Average | | | | | | | | | | | | | | | | |
| 1977–2012 | 7,885 | 16,824 | 3,171 | 7,559 | 3,242 | 505 | 4,133 | 2,070 | 3,970 | 402 | 503 | 308 | 353 | 798 | 164 | 51,182 |
| 2008–2012 | 2,897 | 14,101 | 4,151 | 2,207 | 1,708 | 162 | 1,128 | 313 | 388 | 185 | 290 | 54 | 821 | 0 | 83 | 28,488 |
| % of average | | | | | | | | | | | | | | | | |
| 1977–2012 | 15 | 33 | 6 | 15 | 6 | 1 | 8 | 4 | 8 | 1 | 1 | 1 | 1 | 2 | <1 | 100 |
| 2013 | 18 | 12,989 | 4,170 | 2,986 | 1,519 | 28 | 1,248 | 605 | 226 | 144 | 474 | 0 | 1,223 | 0 | 0 | 25,630 |

Source: Mills (1979, 1980, 1981a, 1981b, 1982–1994); Howe et al. (1995, 1996); Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

^a Totals for 2011 include Susitna River salmon, rainbow trout, Arctic grayling, and burbot.

Table 10.—Westside Susitna River Management Unit sport fish harvest by species, 1977–2013.

| Year | Chinook salmon | Coho salmon | Sockeye salmon | Pink salmon | Chum salmon | Rainbow trout | Dolly Varden | Arctic grayling | Lake trout | Burbot | Northern pike | White-fish | Smelt | Other | Total |
|------|----------------|-------------|----------------|-------------|-------------|---------------|--------------|-----------------|------------|--------|---------------|------------|--------|-------|--------|
| 1977 | 2,938 | 6,599 | 2,786 | 8,142 | 423 | 7,472 | 2,246 | 4,414 | 278 | 115 | 132 | | | 551 | 36,096 |
| 1978 | 2,039 | 10,173 | 1,634 | 5,605 | 2,635 | 12,295 | 2,667 | 6,725 | 596 | 153 | 316 | | | 370 | 45,208 |
| 1979 | 5,768 | 9,036 | 1,557 | 1,854 | 1,154 | 12,555 | 4,591 | 9,089 | 63 | 454 | 382 | | | 436 | 46,939 |
| 1980 | 6,148 | 12,141 | 1,111 | 4,237 | 491 | 12,785 | 2,825 | 9,247 | 448 | 706 | 232 | | | 103 | 50,474 |
| 1981 | 4,742 | 5,940 | 1,408 | 555 | 240 | 11,296 | 2,003 | 5,250 | 297 | 211 | 125 | | | 86 | 32,153 |
| 1982 | 8,573 | 10,658 | 2,881 | 2,065 | 293 | 11,465 | 1,813 | 6,525 | 167 | 776 | 607 | | | 366 | 46,189 |
| 1983 | 9,568 | 3,610 | 3,549 | 702 | 398 | 9,253 | 2,400 | 9,314 | 849 | 807 | 944 | | | 461 | 41,855 |
| 1984 | 12,106 | 9,511 | 3,415 | 2,467 | 872 | 8,079 | 798 | 7,409 | 562 | 1,309 | 1,821 | | | 598 | 48,947 |
| 1985 | 13,644 | 11,270 | 2,302 | 584 | 347 | 8,114 | 1,267 | 5,895 | 328 | 560 | 1,248 | 525 | 1,680 | 104 | 47,868 |
| 1986 | 13,402 | 13,117 | 4,076 | 3,385 | 615 | 6,668 | 2,470 | 5,441 | 157 | 715 | 1,519 | 435 | 7,300 | 0 | 59,300 |
| 1987 | 13,350 | 8,746 | 2,427 | 1,467 | 688 | 8,020 | 688 | 4,908 | 797 | 3,640 | 1,540 | 1,685 | 9,265 | 31 | 57,252 |
| 1988 | 15,970 | 16,283 | 3,167 | 2,582 | 1,474 | 8,058 | 1,401 | 4,275 | 327 | 944 | 2,818 | 1,419 | 8,849 | 0 | 67,567 |
| 1989 | 19,343 | 18,226 | 2,307 | 1,045 | 415 | 4,928 | 1,486 | 2,104 | 352 | 192 | 2,257 | 382 | 2,324 | 0 | 55,361 |
| 1990 | 17,425 | 13,883 | 1,938 | 1,238 | 234 | 3,960 | 1,163 | 2,158 | 202 | 1,534 | 2,088 | 1,381 | 5,591 | 51 | 52,846 |
| 1991 | 21,836 | 20,507 | 3,083 | 524 | 191 | 4,526 | 1,436 | 3,367 | 289 | 97 | 3,931 | 531 | 6,132 | 64 | 66,514 |
| 1992 | 18,737 | 16,218 | 2,916 | 1,264 | 304 | 2,028 | 400 | 1,572 | 363 | 304 | 2,777 | 340 | 15,523 | 22 | 62,768 |
| 1993 | 21,142 | 15,454 | 2,161 | 586 | 147 | 2,481 | 463 | 1,422 | 276 | 264 | 3,619 | 555 | 6,596 | 49 | 55,215 |
| 1994 | 10,248 | 15,361 | 1,919 | 1,259 | 312 | 2,526 | 507 | 1,654 | 113 | 1,090 | 2,556 | 779 | 9,483 | 84 | 47,891 |
| 1995 | 6,265 | 17,148 | 2,106 | 361 | 591 | 1,757 | 622 | 895 | 84 | 190 | 3,024 | 76 | 4,549 | 20 | 37,688 |
| 1996 | 5,879 | 17,375 | 1,115 | 558 | 297 | 1,924 | 693 | 1,736 | 87 | 396 | 3,902 | 160 | 1,818 | 0 | 35,940 |
| 1997 | 7,799 | 7,123 | 3,109 | 729 | 989 | 1,452 | 249 | 844 | 311 | 861 | 4,026 | 18 | 8,515 | 85 | 36,110 |
| 1998 | 9,716 | 13,235 | 2,463 | 1,589 | 394 | 1,081 | 122 | 987 | 46 | 1,029 | 3,753 | 114 | 5,795 | 5 | 40,329 |
| 1999 | 12,131 | 17,995 | 5,279 | 577 | 421 | 1,866 | 266 | 715 | 72 | 672 | 3,686 | 95 | 27,031 | 0 | 70,806 |
| 2000 | 17,341 | 23,262 | 4,946 | 2,159 | 594 | 1,226 | 534 | 666 | 60 | 1,130 | 3,692 | 139 | 5,492 | 11 | 61,252 |

-continued-

Table 10.—Page 2 of 2.

| Year | Chinook salmon | Coho salmon | Sockeye salmon | Pink salmon | Chum salmon | Rain-bow trout | Dolly Varden | Arctic grayling | Lake trout | Burbot | Northern pike ^a | White-fish | Smelt ^b | Other | Total |
|--------------|----------------|-------------|----------------|-------------|-------------|----------------|--------------|-----------------|------------|--------|----------------------------|------------|--------------------|-------|--------|
| 2001 | 13,914 | 19,221 | 6,311 | 1,074 | 439 | 759 | 304 | 575 | 34 | 245 | 5,479 | 111 | 8,707 | 0 | 57,173 |
| 2002 | 11,357 | 14,144 | 1,881 | 700 | 377 | 1,209 | 320 | 479 | 0 | 91 | 5,865 | 74 | 3,298 | 236 | 40,031 |
| 2003 | 15,035 | 16,072 | 8,660 | 449 | 476 | 1,425 | 78 | 327 | 169 | 397 | 3,816 | 93 | 5,465 | 0 | 52,462 |
| 2004 | 15,694 | 17,785 | 3,358 | 2,292 | 520 | 1,629 | 124 | 291 | 109 | 320 | 6,626 | 218 | 12,562 | 24 | 61,552 |
| 2005 | 15,945 | 18,266 | 2,219 | 519 | 111 | 339 | 151 | 208 | 152 | 292 | 4,889 | 71 | 3,068 | 3,214 | 49,444 |
| 2006 | 16,454 | 20,474 | 626 | 338 | 113 | 1,027 | 209 | 716 | 0 | 126 | 4,318 | 168 | 0 | 1,364 | 45,933 |
| 2007 | 11,370 | 14,065 | 3,177 | 451 | 136 | 619 | 79 | 330 | 56 | 350 | 3,526 | 242 | 620 | 0 | 35,021 |
| 2008 | 6,805 | 15,126 | 1,428 | 201 | 231 | 744 | 91 | 350 | 55 | 256 | 5,683 | 89 | 1,832 | 27 | 32,918 |
| 2009 | 4,713 | 14,464 | 2,358 | 734 | 193 | 865 | 190 | 182 | 48 | 86 | 3,368 | 50 | 0 | 74 | 27,325 |
| 2010 | 6,306 | 16,245 | 1,505 | 585 | 223 | 434 | 40 | 725 | 132 | 55 | 5,283 | 97 | 2,510 | 0 | 34,140 |
| 2011 | 5,914 | 12,483 | 3,413 | 124 | 54 | 341 | 52 | 154 | 31 | 116 | 2,969 | 0 | 6,763 | 175 | 32,589 |
| 2012 | 2,525 | 9,434 | 1,118 | 314 | 156 | 179 | 139 | 175 | 16 | 204 | 4,505 | 66 | 3,290 | 0 | 22,121 |
| Average | | | | | | | | | | | | | | | |
| 1977–2012 | 11,171 | 13,907 | 2,770 | 1,481 | 487 | 4,316 | 969 | 2,809 | 220 | 575 | 2,981 | 354 | 6,216 | 239 | 47,035 |
| 2008–2012 | 5,253 | 13,550 | 1,964 | 392 | 171 | 513 | 102 | 317 | 56 | 143 | 4,362 | 60 | 2,879 | 55 | 29,819 |
| % of average | | | | | | | | | | | | | | | |
| 1977–2012 | 24 | 30 | 6 | 3 | 1 | 9 | 2 | 6 | <1 | 1 | 6 | 1 | 13 | 1 | 100 |
| 2013 | 2,427 | 13,042 | 5,190 | 225 | 158 | 468 | 162 | 909 | 44 | 80 | 8,168 | 0 | 1,704 | 0 | 32,577 |

Source: Mills (1979, 1980, 1981a, 1981b, 1982–1994); Howe et al. (1995, 1996); Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

^a Northern pike may include Susitna River totals.

^b Smelt may include Susitna River totals.

Table 11.—West Cook Inlet Management Unit sport fish harvest by species, 1977–2013.

| Year | Chinook salmon | Coho salmon | Sockeye salmon | Pink salmon | Chum salmon | Rainbow trout | Dolly Varden | Arctic grayling | Lake trout | Burbot | White-fish | Smelt | Northern pike | Other | Total |
|------|----------------|-------------|----------------|-------------|-------------|---------------|--------------|-----------------|------------|--------|------------|-------|---------------|-------|--------|
| 1977 | 473 | 532 | 6 | 670 | 7 | 958 | 852 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 3,510 |
| 1978 | 478 | 378 | 0 | 650 | 0 | 723 | 841 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,070 |
| 1979 | 98 | 337 | 0 | 64 | 0 | 1,063 | 846 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 2,453 |
| 1980 | 34 | 628 | 0 | 301 | 0 | 560 | 275 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,798 |
| 1981 | 192 | 604 | 48 | 95 | 0 | 1,734 | 958 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,631 |
| 1982 | 147 | 745 | 10 | 210 | 0 | 398 | 304 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,814 |
| 1983 | 1,185 | 2,552 | 466 | 21 | 10 | 871 | 366 | 115 | 0 | 0 | 0 | 0 | 0 | 10 | 5,596 |
| 1984 | 1,833 | 2,681 | 249 | 62 | 0 | 748 | 535 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 6,145 |
| 1985 | 2,029 | 6,320 | 461 | 137 | 50 | 902 | 885 | 69 | 0 | 0 | 0 | 0 | 0 | 0 | 10,853 |
| 1986 | 2,378 | 4,222 | 89 | 280 | 213 | 223 | 537 | 89 | 0 | 0 | 0 | 0 | 0 | 0 | 8,031 |
| 1987 | 1,477 | 8,548 | 272 | 72 | 54 | 579 | 362 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 11,400 |
| 1988 | 1,695 | 7,403 | 473 | 55 | 109 | 673 | 182 | 73 | 0 | 0 | 0 | 0 | 291 | 0 | 10,954 |
| 1989 | 2,325 | 7,683 | 529 | 110 | 0 | 544 | 191 | 143 | 19 | 48 | 0 | 0 | 0 | 0 | 11,592 |
| 1990 | 2,097 | 6,016 | 636 | 24 | 12 | 472 | 270 | 51 | 0 | 135 | 0 | 0 | 0 | 0 | 9,713 |
| 1991 | 762 | 8,253 | 765 | 44 | 0 | 497 | 1,145 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 11,492 |
| 1992 | 1,213 | 7,037 | 188 | 18 | 0 | 190 | 516 | 113 | 0 | 0 | 0 | 0 | 0 | 0 | 9,275 |
| 1993 | 1,955 | 10,326 | 2,355 | 70 | 24 | 191 | 416 | 9 | 0 | 9 | 0 | 0 | 0 | 29 | 15,384 |
| 1994 | 1,583 | 8,247 | 2,035 | 16 | 0 | 225 | 91 | 8 | 0 | 0 | 0 | 1,360 | 9 | 9 | 13,583 |
| 1995 | 693 | 8,182 | 1,304 | 0 | 27 | 111 | 424 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10,741 |
| 1996 | 1,358 | 11,430 | 2,951 | 21 | 55 | 439 | 770 | 135 | 0 | 0 | 0 | 363 | 0 | 0 | 17,522 |
| 1997 | 894 | 6,492 | 2,174 | 37 | 33 | 618 | 800 | 256 | 0 | 0 | 68 | 338 | 45 | 0 | 11,755 |
| 1998 | 693 | 8,160 | 2,522 | 75 | 0 | 189 | 300 | 52 | 7 | 0 | 0 | 2,581 | 25 | 0 | 14,604 |
| 1999 | 1,073 | 9,339 | 2,990 | 236 | 122 | 277 | 924 | 66 | 0 | 0 | 0 | 0 | 93 | 0 | 15,120 |
| 2000 | 1,163 | 11,712 | 4,244 | 31 | 39 | 211 | 1,366 | 84 | 55 | 0 | 7 | 204 | 86 | 0 | 19,202 |

-continued-

Table 11.–Page 2 of 2.

| Year | Chinook salmon | Coho salmon | Sockeye salmon | Pink salmon | Chum salmon | Rainbow trout | Dolly Varden | Arctic grayling | Lake trout | Burbot | White-fish | Smelt | Northern pike | Other | Total |
|--------------|----------------|-------------|----------------|-------------|-------------|---------------|--------------|-----------------|------------|--------|------------|-------|---------------|-------|--------|
| 2001 | 722 | 13,949 | 3,150 | 101 | 252 | 270 | 422 | 38 | 17 | 0 | 0 | 0 | 661 | 0 | 19,582 |
| 2002 | 1,227 | 13,380 | 2,019 | 251 | 10 | 236 | 496 | 7 | 7 | 0 | 0 | 0 | 119 | 0 | 17,752 |
| 2003 | 1,124 | 14,239 | 4,708 | 0 | 77 | 264 | 356 | 0 | 11 | 0 | 0 | 455 | 182 | 0 | 21,416 |
| 2004 | 795 | 16,179 | 3,323 | 157 | 84 | 177 | 368 | 179 | 31 | 0 | 0 | 0 | 493 | 98 | 21,884 |
| 2005 | 592 | 12,572 | 4,025 | 46 | 0 | 196 | 326 | 0 | 0 | 0 | 26 | 0 | 153 | 0 | 17,936 |
| 2006 | 1,038 | 11,940 | 4,993 | 55 | 13 | 170 | 133 | 19 | 6 | 0 | 0 | 0 | 285 | 10 | 18,662 |
| 2007 | 1,380 | 12,580 | 8,187 | 166 | 45 | 216 | 532 | 42 | 164 | 0 | 0 | 0 | 225 | 0 | 23,537 |
| 2008 | 437 | 14,673 | 5,652 | 9 | 153 | 106 | 645 | 56 | 0 | 0 | 0 | 0 | 96 | 0 | 21,827 |
| 2009 | 829 | 9,801 | 4,261 | 181 | 101 | 10 | 153 | 0 | 0 | 0 | 0 | 880 | 88 | 0 | 16,304 |
| 2010 | 854 | 9,030 | 5,232 | 183 | 310 | 89 | 326 | 0 | 0 | 0 | 0 | 0 | 225 | 0 | 16,249 |
| 2011 | 76 | 6,292 | 4,412 | 25 | 0 | 43 | 105 | 0 | 17 | 0 | 0 | 0 | 19 | 0 | 10,989 |
| 2012 | 0 | 7,813 | 4,966 | 33 | 26 | 102 | 283 | 0 | 6 | 0 | 17 | 0 | 0 | 17 | 13,263 |
| Average | | | | | | | | | | | | | | | |
| 1977–2012 | 1,025 | 7,785 | 2,214 | 125 | 51 | 424 | 508 | 47 | 17 | 1 | 11 | 172 | 86 | 6 | 12,462 |
| 2008–2012 | 439 | 9,522 | 4,905 | 86 | 118 | 70 | 302 | 11 | 5 | 0 | 3 | 176 | 86 | 3 | 15,726 |
| % of average | | | | | | | | | | | | | | | |
| 1977–2012 | 8 | 62 | 18 | 1 | <1 | 3 | 4 | <1 | <1 | <1 | <1 | 1 | 1 | <1 | 100 |
| 2013 | 0 | 7,698 | 5,003 | 0 | 0 | 0 | 347 | 187 | 11 | 0 | 0 | 0 | 35 | 0 | 13,281 |

Source: Mills (1979, 1980, 1981a, 1981b, 1982–1994); Howe et al. (1995, 1996); Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Table 12.—Catch and percent of fish released by sport anglers in the Northern Cook Inlet Management Area for 2001–2007.

| Species | 2001 | | 2002 | | 2003 | | 2004 | | 2005 | | 2006 | | 2007 | |
|-------------------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|
| | Catch | % Rel. |
| Chinook salmon | 90,706 | 66.5 | 78,534 | 66.3 | 93,627 | 69.9 | 77,865 | 64.6 | 151,901 | 81.1 | 84,225 | 66.0 | 70,322 | 63.9 |
| Coho salmon | 174,916 | 48.6 | 205,927 | 51.8 | 141,407 | 48.0 | 188,606 | 52.9 | 184,758 | 59.2 | 174,139 | 45.4 | 110,675 | 38.7 |
| Sockeye salmon | 42,639 | 51.8 | 31,661 | 62.3 | 48,540 | 53.2 | 38,286 | 55.8 | 29,771 | 61.8 | 27,002 | 56.8 | 39,248 | 49.4 |
| Pink salmon | 71,872 | 92.7 | 92,105 | 94.4 | 62,963 | 96.4 | 126,574 | 94.8 | 64,022 | 94.6 | 83,821 | 94.0 | 46,864 | 93.5 |
| Chum salmon | 65,219 | 92.3 | 89,862 | 93.9 | 82,645 | 94.7 | 58,706 | 93.3 | 48,532 | 93.1 | 45,155 | 95.1 | 30,031 | 94.2 |
| Landlocked salmon | 24,228 | 68.8 | 17,879 | 48.9 | 13,454 | 56.1 | 15,538 | 61.8 | 17,526 | 61.9 | 11,042 | 66.6 | 4,308 | 59.3 |
| Lake trout | 2,088 | 79.0 | 5,280 | 87.8 | 3,714 | 76.9 | 2,300 | 68.1 | 8,661 | 95.3 | 1,119 | 86.0 | 1,694 | 62.0 |
| Dolly Varden | 24,458 | 81.4 | 25,653 | 83.8 | 43,851 | 90.0 | 35,519 | 88.8 | 47,603 | 93.7 | 26,933 | 90.8 | 27,677 | 82.2 |
| Rainbow trout | 134,763 | 82.8 | 206,537 | 84.7 | 169,677 | 87.1 | 161,254 | 86.7 | 143,424 | 89.1 | 132,482 | 87.7 | 138,979 | 91.2 |
| Arctic grayling | 32,641 | 91.2 | 44,056 | 94.3 | 32,216 | 94.0 | 30,204 | 92.9 | 21,572 | 94.8 | 20,571 | 89.6 | 14,946 | 88.3 |
| Whitefish | 2,435 | 67.3 | 1,426 | 76.8 | 2,919 | 90.3 | 3,492 | 90.6 | 6,151 | 86.9 | 1,480 | 77.7 | 1,220 | 63.2 |
| Northern pike | 42,422 | 70.0 | 32,460 | 62.1 | 29,278 | 72.6 | 33,880 | 64.1 | 37,894 | 70.2 | 31,550 | 63.9 | 21,711 | 62.4 |
| Burbot | 1,121 | 38.5 | 2,473 | 44.6 | 2,122 | 36.6 | 1,354 | 46.2 | 3,672 | 63.0 | 4,065 | 73.4 | 2,424 | 62.4 |
| Smelt | 12,552 | 7.3 | 4,667 | 29.3 | 7,498 | 0.0 | 12,640 | 0.5 | 3,068 | 0.0 | 110 | 35.5 | 744 | 0.0 |
| Other | 1,636 | 81.9 | 921 | 68.2 | 1,360 | 43.3 | 422 | 71.1 | 8,423 | 54.3 | 1,626 | 13.3 | 108 | 54.6 |
| Total | 723,696 | 70.2 | 839,441 | 74.5 | 735,271 | 75.0 | 786,640 | 74.1 | 776,978 | 78.2 | 645,320 | 71.8 | 510,951 | 70.7 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Table 13.–Catch and percent of fish released by sport anglers in the Northern Cook Inlet Management Area for 2008–2013.

| Species | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | Average percent released 2001–2013 |
|-------------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|------------------------------------|
| | Catch | % Rel. | |
| Chinook salmon | 41,086 | 61.3 | 32,710 | 65.9 | 23,107 | 54.5 | 26,308 | 63.1 | 10,132 | 70.2 | 18,137 | 83.8 | 67.5 |
| Coho salmon | 141,508 | 36.4 | 129,331 | 40.6 | 106,123 | 37.9 | 63,235 | 42.6 | 42,728 | 30.0 | 76,426 | 39.7 | 44.0 |
| Sockeye salmon | 32,586 | 48.6 | 38,370 | 48.6 | 27,462 | 40.7 | 27,868 | 50.2 | 24,077 | 45.8 | 28,697 | 40.4 | 51.2 |
| Pink salmon | 46,753 | 94.7 | 112,200 | 94.7 | 54,859 | 94.3 | 30,949 | 93.5 | 42,970 | 95.6 | 40,551 | 91.6 | 94.2 |
| Chum salmon | 32,831 | 93.2 | 30,622 | 91.6 | 36,190 | 93.2 | 41,077 | 93.0 | 50,760 | 93.7 | 25,824 | 92.3 | 93.4 |
| Landlocked salmon | 6,892 | 68.1 | 11,344 | 88.4 | 6,443 | 67.7 | 1,862 | 54.8 | 4,530 | 37.4 | 7,782 | 76.2 | 62.8 |
| Lake trout | 1,659 | 72.7 | 1,589 | 84.6 | 2,781 | 88.6 | 2,063 | 72.7 | 961 | 82.0 | 2,519 | 92.1 | 80.6 |
| Dolly Varden | 26,981 | 88.8 | 19,398 | 87.3 | 19,390 | 86.7 | 17,301 | 88.5 | 16,396 | 91.2 | 19,657 | 89.1 | 87.9 |
| Rainbow trout | 123,722 | 85.5 | 105,467 | 90.9 | 103,203 | 87.2 | 147,433 | 92.7 | 82,220 | 88.8 | 117,153 | 90.7 | 88.1 |
| Arctic grayling | 20,303 | 92.3 | 26,465 | 92.0 | 19,171 | 89.8 | 25,130 | 96.8 | 19,476 | 96.3 | 25,391 | 94.1 | 92.8 |
| Whitefish | 1,826 | 80.1 | 871 | 92.4 | 1,157 | 87.8 | 369 | 69.6 | 462 | 82.0 | 412 | 100.0 | 81.9 |
| Northern pike | 24,367 | 67.2 | 27,903 | 69.6 | 29,557 | 66.5 | 15,262 | 27.3 | 19,387 | 59.7 | 32,808 | 42.8 | 61.4 |
| Burbot | 3,167 | 45.8 | 937 | 67.7 | 1,044 | 37.0 | 611 | 49.6 | 505 | 10.1 | 855 | 32.2 | 46.7 |
| Smelt | 1,832 | 0.0 | 880 | 0.0 | 6,956 | 63.9 | 6,763 | 0.0 | 3,296 | 0.2 | 0 | – | 11.4 |
| Other | 304 | 48.0 | 355 | 79.2 | 0 | 1.0 | 0 | 1.0 | 586 | 50.2 | 0 | – | 47.2 |
| Total | 505,817 | 67.5 | 538,442 | 73.7 | 437,443 | 69.9 | 406,231 | 75.8 | 318,486 | 75.7 | 396,212 | 72.5 | 73.0 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Table 14.—Catch and percent of fish released by sport anglers in the Knik Arm Management Unit, 2008–2013.

| Species | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | |
|-------------------|----------------|-------------|----------------|-------------|----------------|-------------|---------------|-------------|---------------|-------------|----------------|-------------|
| | Catch | % Rel. | Catch | % Rel. | Catch | % Rel. | Catch | % Rel. | Catch | % Rel. | Catch | % Rel. |
| Chinook salmon | 4,989 | 43.0 | 4,388 | 51.0 | 2,789 | 61.4 | 2,066 | 51.0 | 474 | 38.4 | 963 | 48.6 |
| Coho salmon | 50,585 | 28.8 | 52,560 | 29.1 | 34,402 | 23.4 | 12,471 | 32.0 | 7,286 | 31.2 | 16,106 | 23.4 |
| Sockeye salmon | 8,836 | 24.2 | 11,248 | 47.0 | 7,751 | 27.4 | 4,936 | 27.3 | 4,423 | 39.3 | 3,401 | 19.2 |
| Pink salmon | 3,361 | 91.0 | 3,355 | 89.0 | 5,109 | 82.0 | 1,734 | 83.0 | 1,340 | 87.6 | 914 | 80.3 |
| Chum salmon | 4,833 | 87.2 | 3,367 | 78.3 | 4,166 | 87.3 | 3,835 | 82.8 | 4,147 | 81.1 | 2,921 | 89.7 |
| Landlocked salmon | 6,892 | 68.1 | 8,176 | 90.3 | 5,659 | 64.5 | 1,393 | 46.9 | 4,425 | 38.3 | 7,610 | 76.1 |
| Lake trout | 712 | 57.9 | 210 | 66.2 | 712 | 86.0 | 199 | 100.0 | 288 | 83.3 | 115 | 100.0 |
| Dolly Varden | 12,101 | 84.0 | 8,520 | 78.4 | 5,004 | 67.8 | 5,868 | 72.9 | 3,944 | 76.5 | 3,746 | 72.6 |
| Rainbow trout | 67,585 | 77.0 | 39,983 | 80.0 | 42,267 | 74.3 | 44,805 | 79.1 | 29,680 | 72.1 | 52,070 | 82.3 |
| Arctic grayling | 6,774 | 89.0 | 7,300 | 80.1 | 2,794 | 75.4 | 2,888 | 84.8 | 1,814 | 84.7 | 3,976 | 95.5 |
| Whitefish | 244 | 87.3 | 26 | 38.5 | 149 | 88.6 | 112 | 0.0 | 43 | 100.0 | 38 | 100.0 |
| Northern pike | 3,612 | 51.5 | 10,213 | 54.5 | 6,031 | 44.1 | 7,930 | 24.8 | 5,742 | 43.7 | 11,182 | 16.5 |
| Burbot | 1,642 | 43.6 | 482 | 96.5 | 207 | 21.3 | 157 | 15.9 | 84 | 60.7 | 42 | 38.1 |
| Smelt | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| Other | 21 | 100.0 | 0 | | 0 | | 0 | | 0 | | 0 | |
| Total | 172,187 | 59.4 | 149,828 | 57.7 | 117,040 | 54.4 | 88,394 | 63.4 | 63,690 | 61.6 | 103,084 | 63.5 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015).

Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Table 15.—Catch and percent of fish released by sport anglers in the Eastside Susitna River Management Unit, 2008–2013.

| Species | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | |
|-------------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|
| | Catch | % Rel. |
| Chinook salmon | 18,229 | 68.0 | 10,593 | 2,011.0 | 7,660 | 70.3 | 7,680 | 64.7 | 1,855 | 89.1 | 5,502 | 99.7 |
| Coho salmon | 39,895 | 39.3 | 27,523 | 44.3 | 28,503 | 49.9 | 19,016 | 52.5 | 14,164 | 46.1 | 21,147 | 38.6 |
| Sockeye salmon | 6,484 | 54.1 | 14,389 | 50.4 | 7,118 | 45.0 | 5,983 | 58.9 | 7,777 | 45.0 | 8,372 | 50.2 |
| Pink salmon | 33,882 | 94.1 | 79,467 | 94.1 | 29,266 | 95.0 | 19,556 | 92.0 | 26,095 | 94.8 | 37,286 | 92.0 |
| Chum salmon | 21,232 | 94.2 | 23,325 | 93.4 | 25,365 | 94.5 | 28,674 | 92.4 | 37,125 | 94.0 | 20,939 | 92.7 |
| Landlocked salmon | 0 | | 3,168 | 83.3 | 784 | 90.3 | 469 | 78.3 | 105 | 0.0 | 172 | 83.7 |
| Lake trout | 769 | 87.3 | 790 | 84.2 | 1,555 | 94.6 | 1,421 | 63.7 | 516 | 80.0 | 1,887 | 92.4 |
| Dolly Varden | 7,216 | 95.0 | 6,028 | 95.3 | 6,515 | 90.9 | 6,628 | 96.4 | 4,669 | 98.0 | 8,820 | 93.1 |
| Rainbow trout | 36,798 | 95.9 | 36,707 | 98.1 | 39,958 | 95.4 | 63,725 | 98.5 | 27,446 | 97.7 | 44,029 | 97.2 |
| Arctic grayling | 9,177 | 95.4 | 10,012 | 95.1 | 9,579 | 94.3 | 14,120 | 98.5 | 10,218 | 97.3 | 11,772 | 98.1 |
| Whitefish | 1,039 | 76.5 | 277 | 100.0 | 433 | 93.8 | 147 | 100.0 | 230 | 100.0 | 374 | 100.0 |
| Northern pike | 4,750 | 90.1 | 1,318 | 70.8 | 6,935 | 85.1 | 3,508 | 39.1 | 3,959 | 98.0 | 1,630 | 25.0 |
| Burbot | 1,077 | 50.5 | 298 | 32.9 | 726 | 39.4 | 313 | 80.8 | 217 | 0.0 | 514 | 7.8 |
| Smelt | 0 | | 0 | | 4,446 | 100.0 | 6,763 | 100.0 | 0 | | 0 | |
| Other | 256 | 48.8 | 176 | 100.0 | 0 | | 0 | | 516 | 46.7 | 0 | |
| Total | 180,804 | 77.9 | 214,071 | 83.7 | 168,843 | 83.4 | 178,003 | 87.5 | 134,892 | 87.1 | 162,444 | 84.2 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Table 16.—Percent of fish released by sport anglers in the Westside Susitna River Management Unit, 2008–2013.

| Species | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | |
|-------------------|---------|--------|---------|--------|---------|--------|---------|--------|--------|--------|---------|--------|
| | Catch | % Rel. | Catch | % Rel. | Catch | % Rel. |
| Chinook salmon | 16,206 | 58.0 | 15,822 | 70.2 | 10,429 | 39.5 | 15,374 | 61.5 | 7,525 | 66.4 | 11,360 | 78.6 |
| Coho salmon | 28,928 | 47.7 | 29,838 | 51.5 | 29,673 | 45.3 | 22,034 | 43.3 | 9,434 | 0.0 | 25,256 | 48.4 |
| Sockeye salmon | 6,951 | 79.5 | 4,726 | 50.1 | 4,826 | 68.8 | 8,307 | 58.9 | 3,643 | 69.3 | 9,516 | 45.5 |
| Pink salmon | 8,780 | 97.7 | 27,877 | 97.4 | 19,695 | 97.0 | 9,524 | 98.7 | 14,994 | 97.9 | 1,443 | 84.4 |
| Chum salmon | 4,775 | 95.2 | 3,090 | 93.8 | 5,261 | 95.8 | 6,872 | 99.2 | 7,916 | 98.0 | 245 | 35.5 |
| Landlocked salmon | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Lake trout | 156 | 64.7 | 397 | 87.9 | 160 | 17.5 | 31 | 0.0 | 145 | 89.0 | 210 | 79.0 |
| Dolly Varden | 3,360 | 97.3 | 2,010 | 90.5 | 4,131 | 99.0 | 2,159 | 97.6 | 2,199 | 93.7 | 2,451 | 93.4 |
| Rainbow trout | 18,063 | 95.9 | 27,455 | 96.8 | 20,232 | 97.9 | 38,060 | 99.1 | 24,718 | 99.3 | 20,178 | 97.7 |
| Arctic grayling | 4,269 | 91.8 | 9,142 | 98.0 | 6,798 | 89.3 | 7,975 | 98.1 | 7,313 | 97.6 | 9,456 | 90.4 |
| Whitefish | 536 | 83.4 | 539 | 90.7 | 569 | 83.0 | 110 | 100.0 | 147 | 55.1 | 0 | – |
| Northern pike | 15,776 | 64.0 | 14,389 | 76.6 | 15,826 | 66.6 | 3,787 | 21.6 | 9,686 | 53.5 | 19,753 | 58.6 |
| Burbot | 448 | 42.9 | 157 | 45.2 | 111 | 50.5 | 141 | 17.7 | 204 | 0.0 | 299 | 73.2 |
| Smelt | 1,832 | 0.0 | 0 | – | 2,510 | 0.0 | 0 | – | 3,296 | 0.2 | 0 | – |
| Other | 27 | 0.0 | 179 | 58.7 | 0 | – | 0 | – | 53 | 100.0 | 0 | – |
| Total | 110,107 | 70.1 | 135,621 | 79.9 | 120,221 | 71.6 | 114,374 | 71.5 | 91,273 | 75.8 | 100,167 | 67.5 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Table 17.—Percent of fish released by sport anglers in the West Cook Inlet Management Unit, 2008–2013.

| Species | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | |
|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | Catch | % Rel. |
| Chinook salmon | 1,662 | 73.7 | 1,907 | 56.5 | 2,229 | 61.7 | 1,188 | 93.6 | 278 | 100.0 | 312 | 100.0 |
| Coho salmon | 22,100 | 33.6 | 19,410 | 49.5 | 13,545 | 33.3 | 9,714 | 35.2 | 11,844 | 34.0 | 13,917 | 44.7 |
| Sockeye salmon | 10,315 | 45.2 | 8,007 | 46.8 | 7,767 | 32.6 | 8,642 | 48.9 | 8,234 | 39.7 | 7,408 | 32.5 |
| Pink salmon | 730 | 98.8 | 1,501 | 87.9 | 789 | 76.8 | 135 | 81.5 | 541 | 93.9 | 908 | 100.0 |
| Chum salmon | 1,991 | 92.3 | 840 | 88.0 | 1,398 | 77.8 | 1,696 | 100.0 | 1,572 | 98.3 | 1,719 | 100.0 |
| Landlocked salmon | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Lake trout | 22 | 100.0 | 192 | 100.0 | 354 | 100.0 | 412 | 95.9 | 12 | 50.0 | 307 | 96.4 |
| Dolly Varden | 4,304 | 85.0 | 2,840 | 94.6 | 3,740 | 91.3 | 2,646 | 96.0 | 5,584 | 94.9 | 4,640 | 92.5 |
| Rainbow trout | 1,276 | 91.7 | 1,322 | 99.2 | 746 | 88.1 | 843 | 94.9 | 376 | 72.9 | 876 | 100.0 |
| Arctic grayling | 83 | 32.5 | 11 | 100.0 | 0 | – | 147 | 100.0 | 131 | 100.0 | 187 | 0.0 |
| Whitefish | 7 | 100.0 | 29 | 100.0 | 6 | 100.0 | 0 | – | 42 | 59.5 | 0 | – |
| Northern pike | 229 | 58.1 | 1,983 | 95.6 | 765 | 70.6 | 37 | 48.6 | 0 | – | 243 | 85.6 |
| Burbot | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – | 0 | – |
| Smelt | 0 | – | 880 | 0.0 | 0 | – | 0 | – | 0 | – | 0 | – |
| Other | 0 | – | 0 | – | 0 | – | 0 | – | 17 | 0.0 | 0 | – |
| Total | 42,719 | 48.9 | 38,922 | 58.1 | 31,339 | 48.2 | 25,460 | 56.8 | 28,631 | 53.7 | 30,517 | 56.5 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Table 18.—Summary of guided effort in the Northern Cook Inlet Management Area by management unit, 2006–2013.

| Year | Knik Arm ^a | | Eastside Susitna | | Westside Susitna | | West Cook Inlet | | Total | |
|---------|-----------------------|-------------|------------------|-------------|------------------|-------------|-----------------|-------------|-------|-------------|
| | Trips | Client-days | Trips | Client-days | Trips | Client-days | Trips | Client-days | Trips | Client-days |
| 2006 | 373 | 1,344 | 778 | 2,871 | 2,445 | 7,658 | 2,566 | 9,650 | 6,162 | 21,523 |
| 2007 | 456 | 1,668 | 880 | 3,353 | 2,775 | 8,786 | 2,812 | 10,656 | 6,923 | 24,463 |
| 2008 | 492 | 1,843 | 774 | 3,003 | 3,555 | 10,294 | 2,700 | 10,653 | 7,521 | 25,793 |
| 2009 | 473 | 1,696 | 437 | 1,656 | 2,300 | 6,795 | 1,960 | 7,203 | 5,170 | 17,350 |
| 2010 | 359 | 1,312 | 401 | 1,460 | 3,509 | 10,311 | 1,824 | 6,929 | 6,093 | 20,012 |
| 2011 | 282 | 1,075 | 603 | 2,243 | 2,836 | 8,070 | 1,958 | 7,528 | 5,679 | 18,916 |
| 2012 | 160 | 563 | 531 | 2,062 | 2,300 | 6,772 | 2,002 | 7,519 | 4,993 | 16,916 |
| 2013 | 209 | 767 | 386 | 1,508 | 1,894 | 5,725 | 2,134 | 7,957 | 4,623 | 15,957 |
| Average | 351 | 1,284 | 599 | 2,270 | 2,702 | 8,051 | 2,245 | 8,512 | 5,896 | 20,116 |

Source: Freshwater Logbook Database. Alaska Department of Fish and Game, Division of Sport Fish. 2006 to present. (Accessed September 3, 2016). [URL not publicly available as some information is confidential. Contact Research and Technical Services for data requests.]. See also Sigurdsson and Powers (2009–2014).

^a Nearly all effort is from the Little Susitna River.

Table 19.—Guided effort on major West Cook Inlet Management Unit tributaries, 2006–2013.

| Tributary | Parameter | Year | | | | | | | | Averages |
|------------------------------|-------------|-------|--------|--------|-------|-------|-------|-------|-------|----------|
| | | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | |
| Big River Lakes | | | | | | | | | | |
| | Guides | 43 | 44 | 51 | 40 | 35 | 32 | 42 | 37 | 41 |
| | Trips | 912 | 956 | 1,351 | 822 | 674 | 749 | 705 | 821 | 874 |
| | Client-days | 3,490 | 3,624 | 5,327 | 3,094 | 2,620 | 2,838 | 2,707 | 3,179 | 3,360 |
| Chuitna River | | | | | | | | | | |
| | Guides | 27 | 22 | 15 | 17 | 10 | 13 | 8 | 8 | 15 |
| | Trips | 115 | 118 | 54 | 68 | 31 | 38 | 22 | 20 | 58 |
| | Client-days | 406 | 465 | 221 | 245 | 125 | 150 | 93 | 90 | 224 |
| Kustatan River | | | | | | | | | | |
| | Guides | 43 | 45 | 42 | 34 | 32 | 40 | 36 | 41 | 39 |
| | Trips | 253 | 330 | 309 | 242 | 215 | 269 | 240 | 297 | 269 |
| | Client-days | 1,110 | 1,421 | 1,375 | 996 | 914 | 1,097 | 1,004 | 1,278 | 1,149 |
| Lewis River | | | | | | | | | | |
| | Guides | 1 | | | 1 | | | | 1 | 1 |
| | Trips | 1 | | | 4 | | | | 1 | 3 |
| | Client-days | 2 | | | 9 | | | | 3 | 6 |
| Theodore River | | | | | | | | | | |
| | Guides | 1 | 5 | 4 | 1 | 1 | | 1 | 2 | 2 |
| | Trips | 26 | 32 | 10 | 8 | 1 | | 4 | 10 | 13 |
| | Client-days | 64 | 92 | 29 | 20 | 4 | | 16 | 36 | 37 |
| Wolverine Creek ^a | | | | | | | | | | |
| | Guides | 42 | 46 | 36 | 30 | 30 | 31 | 31 | 26 | 34 |
| | Trips | 809 | 915 | 585 | 417 | 526 | 501 | 569 | 413 | 592 |
| | Client-days | 3,084 | 3,591 | 2,317 | 1,538 | 1,953 | 2,017 | 2,136 | 1,554 | 2,274 |
| Crescent drainage | | | | | | | | | | |
| | Guides | 11 | 18 | 21 | 15 | 18 | 18 | 29 | 29 | 20 |
| | Trips | 152 | 172 | 159 | 162 | 120 | 79 | 282 | 263 | 174 |
| | Client-days | 546 | 611 | 555 | 518 | 419 | 350 | 863 | 850 | 589 |
| Total | | | | | | | | | | |
| | Trips | 2,566 | 2,812 | 2,700 | 1,960 | 1,824 | 1,958 | 2,002 | 2,134 | 2,245 |
| | Client-days | 9,650 | 10,656 | 10,653 | 7,203 | 6,929 | 7,528 | 7,519 | 7,957 | 8,512 |

Source: Freshwater Logbook Database. Alaska Department of Fish and Game, Division of Sport Fish. 2006 to present. (Accessed September 3, 2016). [URL not publicly available as some information is confidential. Contact Research and Technical Services for data requests.] See also Sigurdsson and Powers (2009–2014).

Note: Totals include entire management unit and not just the major rivers listed. The number of guides cannot be totaled because they cross multiple streams and areas.

^a Located near Big River Lakes.

Table 20.—Guided effort on major Westside Susitna River Management Unit tributaries, 2006–2013.

| Tributary | Parameter | Year | | | | | | | | Averages |
|---------------------------------|-------------|-------|-------|--------|-------|--------|-------|-------|-------|----------|
| | | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | |
| Deshka River ^a | | | | | | | | | | |
| Above weir | | | | | | | | | | |
| | Guides | 12 | 4 | 4 | 1 | 3 | 6 | 2 | 2 | 4 |
| | Trips | 75 | 32 | 21 | 7 | 54 | 106 | 53 | 48 | 50 |
| | Client-days | 275 | 144 | 57 | 13 | 193 | 375 | 174 | 163 | 174 |
| Below weir | | | | | | | | | | |
| | Guides | 25 | 21 | 16 | 6 | 12 | 15 | 16 | 14 | 16 |
| | Trips | 309 | 390 | 185 | 67 | 244 | 203 | 299 | 269 | 246 |
| | Client-days | 1,206 | 1,511 | 703 | 267 | 937 | 766 | 1,170 | 995 | 944 |
| Lake Creek | | | | | | | | | | |
| | Guides | 61 | 58 | 63 | 63 | 52 | 65 | 49 | 50 | 58 |
| | Trips | 1,072 | 1,344 | 1,195 | 1,444 | 1,374 | 1,427 | 1,031 | 993 | 1,235 |
| | Client-days | 3,229 | 3,835 | 3,374 | 4,132 | 3,882 | 3,719 | 2,778 | 2,786 | 3,467 |
| Talachulitna River ^b | | | | | | | | | | |
| | Guides | 27 | 32 | 52 | 29 | 37 | 20 | 16 | 16 | 29 |
| | Trips | 410 | 435 | 950 | 384 | 545 | 348 | 290 | 241 | 450 |
| | Client-days | 1,245 | 1,446 | 2,648 | 1,158 | 1,579 | 953 | 752 | 658 | 1,305 |
| Fish Lake Creek ^c | | | | | | | | | | |
| | Guides | 16 | 11 | 24 | 9 | 12 | 10 | 6 | 15 | 13 |
| | Trips | 69 | 15 | 152 | 30 | 33 | 33 | 18 | 24 | 47 |
| | Client-days | 161 | 40 | 399 | 78 | 100 | 102 | 48 | 67 | 124 |
| Alexander Creek ^d | | | | | | | | | | |
| | Guides | 2 | | | | | 1 | 6 | | 3 |
| | Trips | 7 | | | | | 1 | 6 | | 5 |
| | Client-days | 18 | | | | | 2 | 21 | | 14 |
| Total | | | | | | | | | | |
| | Trips | 2,445 | 2,775 | 3,555 | 2,300 | 3,509 | 2,836 | 2,300 | 1,894 | 2,702 |
| | Client-days | 7,658 | 8,786 | 10,294 | 6,795 | 10,311 | 8,070 | 6,772 | 5,725 | 8,051 |

Source: Freshwater Logbook Database. Alaska Department of Fish and Game, Division of Sport Fish. 2006 to present. (Accessed September 3, 2016). [URL not publicly available as some information is confidential. Contact Research and Technical Services for data requests.] See also Sigurdsson and Powers (2009–2014).

Note: Totals include entire management unit and not just the major rivers listed. The number of guides cannot be totaled because they cross multiple streams and areas.

^a Unspecified Deshka River client-days were 12 in 2006, 112 in 2008, and 4 in 2009.

^b Includes Talachulitna Creek drainage.

^c Fish Creek drainage (Yentna River drainage).

^d Alexander Creek has been closed to sport fishing for Chinook salmon since 2007.

Table 21.—Guided effort on major Eastside Susitna River Management Unit tributaries, 2006–2013.

| Tributary | Parameter | Year | | | | | | | | Averages |
|------------------------------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
| | | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | |
| Kashwitna River | | | | | | | | | | |
| | Guides | 5 | 4 | 3 | 3 | 3 | 4 | 2 | 2 | 3 |
| | Trips | 54 | 51 | 48 | 25 | 31 | 56 | 29 | 4 | 37 |
| | Client- days | 213 | 195 | 190 | 98 | 126 | 210 | 106 | 14 | 144 |
| Little Willow Creek | | | | | | | | | | |
| | Guides | 10 | 4 | 10 | 6 | 7 | 2 | 1 | 5 | 6 |
| | Trips | 39 | 28 | 50 | 25 | 27 | 11 | 15 | 37 | 29 |
| | Client-days | 134 | 101 | 155 | 81 | 97 | 38 | 52 | 133 | 99 |
| Montana Creek | | | | | | | | | | |
| | Guides | 5 | 3 | 3 | 2 | 4 | 4 | 2 | 2 | 3 |
| | Trips | 21 | 11 | 14 | 7 | 10 | 8 | 9 | 5 | 11 |
| | Client-days | 45 | 18 | 34 | 15 | 19 | 22 | 17 | 8 | 22 |
| Sheep Creek | | | | | | | | | | |
| | Guides | 3 | 5 | 1 | 1 | 4 | 2 | 1 | 1 | 2 |
| | Trips | 3 | 12 | 2 | 2 | 5 | 3 | 1 | 4 | 4 |
| | Client-days | 10 | 38 | 6 | 4 | 17 | 5 | 2 | 7 | 11 |
| Talkeetna River ^a | | | | | | | | | | |
| | Guides | 30 | 23 | 30 | 23 | 19 | 20 | 18 | 18 | 23 |
| | Trips | 414 | 351 | 487 | 307 | 130 | 379 | 278 | 146 | 312 |
| | Client-days | 1,764 | 1,551 | 2,068 | 1,253 | 804 | 1,461 | 1,109 | 621 | 1,329 |
| Willow Creek | | | | | | | | | | |
| | Guides | 14 | 11 | 13 | 6 | 6 | 7 | 1 | 4 | 8 |
| | Trips | 88 | 93 | 44 | 20 | 47 | 26 | 12 | 10 | 43 |
| | Client-days | 186 | 197 | 99 | 34 | 98 | 76 | 49 | 12 | 94 |
| Total | | | | | | | | | | |
| | Trips | 778 | 880 | 774 | 437 | 401 | 603 | 531 | 386 | 599 |
| | Client days | 2,871 | 3,353 | 3,003 | 1,656 | 1,460 | 2,243 | 2,062 | 1,508 | 2,270 |

Source: Freshwater Logbook Database. Alaska Department of Fish and Game, Division of Sport Fish. 2006 to present. (Accessed September 3, 2016). [URL not publicly available as some information is confidential. Contact Research and Technical Services for data requests.] See also Sigurdsson and Powers (2009–2014).

Note: Totals include entire management unit and not just the major rivers listed. The number of guides cannot be totaled because they cross multiple streams and areas.

^a Includes Talkeetna River and tributaries including Clear Creek.

Table 22.—Guided effort in the Knik Arm Management Unit, 2006–2013.

| Year | Little Susitna River | | | Total | |
|---------|----------------------|-------|-------------|-------|-------------|
| | Guides | Trips | Client-days | Trips | Client Days |
| 2006 | 16 | 372 | 1,340 | 373 | 1,344 |
| 2007 | 15 | 452 | 1,653 | 456 | 1,668 |
| 2008 | 20 | 488 | 1,828 | 492 | 1,843 |
| 2009 | 18 | 472 | 1,694 | 473 | 1,696 |
| 2010 | 16 | 357 | 1,308 | 359 | 1,312 |
| 2011 | 13 | 278 | 1,065 | 282 | 1,075 |
| 2012 | 13 | 146 | 528 | 160 | 563 |
| 2013 | 6 | 209 | 767 | 209 | 767 |
| Average | 15 | 347 | 1,273 | 351 | 1,284 |

Source: Freshwater Logbook Database. Alaska Department of Fish and Game, Division of Sport Fish. 2006 to present. (Accessed September 3, 2016). [URL not publicly available as some information is confidential. Contact Research and Technical Services for data requests.] See also Sigurdsson and Powers (2009–2014).

Table 23.–Harvest summary data for guided sport anglers in the Northern Cook Inlet Management Area, 2006–2013.

| Management Unit | Year | Guides | Clients | Trips | Chinook salmon | Coho salmon | Sockeye salmon | Rainbow trout |
|-------------------------------|---------|--------|---------|-------|----------------|-------------|----------------|---------------|
| Knik Arm | | | | | | | | |
| | 2006 | 19 | 1,344 | 373 | 379 | 1,044 | 2 | 0 |
| | 2007 | 19 | 1,668 | 456 | 363 | 937 | 33 | 1 |
| | 2008 | 22 | 1,843 | 492 | 419 | 1,361 | 3 | 1 |
| | 2009 | 19 | 1,696 | 473 | 323 | 718 | 5 | 3 |
| | 2010 | 17 | 1,312 | 359 | 146 | 1,143 | 5 | 8 |
| | 2011 | 14 | 1,075 | 282 | 149 | 869 | 2 | 0 |
| | 2012 | 13 | 563 | 160 | 16 | 332 | 3 | 2 |
| | 2013 | 6 | 767 | 209 | 119 | 744 | 0 | 2 |
| | Average | 16 | 1,284 | 351 | 239 | 894 | 7 | 2 |
| Susitna River drainage | | | | | | | | |
| | 2006 | 157 | 10,529 | 3,223 | 2,887 | 5,074 | 59 | 85 |
| | 2007 | 172 | 12,139 | 3,655 | 2,892 | 3,994 | 1,297 | 107 |
| | 2008 | 203 | 13,297 | 4,329 | 2,283 | 6,809 | 1,325 | 152 |
| | 2009 | 138 | 8,451 | 2,737 | 1,422 | 4,094 | 1,403 | 26 |
| | 2010 | 147 | 11,771 | 3,910 | 1,686 | 5,982 | 1,053 | 61 |
| | 2011 | 147 | 10,313 | 3,439 | 1,836 | 4,969 | 1,730 | 99 |
| | 2012 | 122 | 8,834 | 2,831 | 807 | 2,892 | 1,166 | 44 |
| | 2013 | 129 | 7,233 | 2,280 | 460 | 13,804 | 9,210 | 28 |
| | Average | 152 | 10,321 | 3,301 | 1,784 | 5,952 | 2,155 | 75 |
| Eastside Susitna ^a | | | | | | | | |
| | 2006 | – | 2,871 | 778 | 621 | 997 | 13 | 3 |
| | 2007 | – | 3,353 | 880 | 616 | 1,239 | 344 | 20 |
| | 2008 | – | 3,003 | 774 | 523 | 1,293 | 680 | 47 |
| | 2009 | – | 1,656 | 437 | 340 | 375 | 555 | 2 |
| | 2010 | – | 1,460 | 401 | 223 | 333 | 398 | 13 |
| | 2011 | – | 2,243 | 603 | 397 | 650 | 442 | 7 |
| | 2012 | – | 2,062 | 531 | 23 | 903 | 575 | 2 |
| | 2013 | – | 1,508 | 386 | 2 | 319 | 250 | 2 |
| | Average | | 2,270 | 599 | 343 | 764 | 407 | 12 |
| Westside Susitna ^a | | | | | | | | |
| | 2006 | – | 7,658 | 2,445 | 2,266 | 4,077 | 46 | 82 |
| | 2007 | – | 8,786 | 2,775 | 2,276 | 2,755 | 953 | 87 |
| | 2008 | – | 10,294 | 3,555 | 1,760 | 5,516 | 645 | 105 |
| | 2009 | – | 6,795 | 2,300 | 1,082 | 3,719 | 848 | 24 |
| | 2010 | – | 10,311 | 3,509 | 1,463 | 5,649 | 655 | 48 |
| | 2011 | – | 8,070 | 2,836 | 1,439 | 4,319 | 1,288 | 92 |
| | 2012 | – | 6,772 | 2,300 | 784 | 1,989 | 591 | 42 |
| | 2013 | – | 5,725 | 1,894 | 432 | 2,593 | 383 | 28 |
| | Average | | 8,051 | 2,702 | 1,438 | 3,827 | 676 | 64 |

-continued-

Table 23.–Page 2 of 2.

| Management Unit | Year | Guides | Clients | Trips | Chinook salmon | Coho salmon | Sockeye salmon | Rainbow trout |
|-----------------|---------|--------|---------|-------|----------------|-------------|----------------|---------------|
| West Cook Inlet | | | | | | | | |
| | 2006 | 18 | 9,650 | 2,566 | 146 | 12,211 | 8,240 | 2 |
| | 2007 | 122 | 10,656 | 2,812 | 213 | 10,861 | 12,697 | 16 |
| | 2008 | 127 | 10,653 | 2,700 | 49 | 15,133 | 8,752 | 1 |
| | 2009 | 105 | 7,203 | 1,960 | 124 | 7,256 | 7,562 | 0 |
| | 2010 | 83 | 6,929 | 1,824 | 17 | 8,987 | 6,535 | 0 |
| | 2011 | 97 | 7,528 | 1,958 | 8 | 7,347 | 7,630 | 30 |
| | 2012 | 107 | 7,519 | 2,002 | 25 | 6,931 | 9,674 | 2 |
| | 2013 | 108 | 7,957 | 2,134 | 0 | 7,977 | 7,600 | 2 |
| | Average | 96 | 8,512 | 2,245 | 73 | 9,588 | 8,586 | 7 |

Source: Freshwater Logbook Database. Alaska Department of Fish and Game, Division of Sport Fish. 2006 to present. (Accessed September 3, 2016). [URL not publicly available as some information is confidential. Contact Research and Technical Services for data requests.] See also Sigurdsson and Powers (2009–2014).

^a Susitna River drainage is subdivided into Eastside and Westside areas; total number of guides is available for the Susitna River drainage only.

Table 24.—Economic value of sport fishing in Southcentral Alaska and the Matanuska–Susitna Borough during 2007.

| Parameter | Southcentral ^a | | | Matanuska–Susitna Borough ^b | | |
|-----------------------|---------------------------|---------------|---------------|--|--------------|---------------|
| | Resident | Nonresident | Total | Resident | Nonresident | Total |
| Angler-days | 1,085,962 | 710,843 | 1,796,805 | 178,886 | 117,095 | 295,981 |
| % of Southcentral | | | | 16.5 | 16.5 | 16.5 |
| Spending ^c | \$560,955,071 | \$427,603,048 | \$988,558,119 | \$92,404,041 | \$70,437,459 | \$162,841,500 |
| \$/angler-day | \$517 | \$602 | \$550 | \$517 | \$602 | \$550 |
| Income | \$174,829,996 | \$211,633,737 | \$386,463,733 | \$28,799,095 | \$34,861,638 | \$63,660,732 |
| Employment (jobs) | 5,170 | 6,365 | 11,535 | 852 | 1,048 | 1,900 |

^a Source: Southwick Associates Inc. et al. 2008.

^b Source: Colt and Schwoerer 2009

^c Includes license and stamps, trips, packages, equipment, and real estate, and assumes all equipment and real estate were to be used only for sport fishing.

Table 25.—Susitna River mark–recapture estimated abundance by species and year.

| Salmon species | Return year | Mainstem Susitna River abundance ^{a,b} | | | Yentna River abundance ^a | | | Total ^a | | | Source ^c |
|----------------|-------------|---|--------------|--------------|--------------------------------------|--------------|--------------|--------------------------------------|--------------|--------------|---------------------|
| | | Point estimate | Lower 95% CI | Upper 95% CI | Point estimate | Lower 95% CI | Upper 95% CI | Point estimate | Lower 95% CI | Upper 95% CI | |
| Sockeye | 2006 | 107,000 | 49,180 | 164,820 | 311,197 | 252,000 | 391,000 | 418,197 | 335,448 | 500,946 | FDS 07-83 |
| | 2007 | 87,883 | 79,712 | 96,054 | 239,849 | 205,955 | 273,743 | 327,732 | 292,867 | 362,597 | FDS 11-19 |
| | 2008 | 70,552 | 60,882 | 80,221 | 288,988 | 251,436 | 326,540 | 359,540 | 320,763 | 398,317 | FDS 11-12 |
| Coho | 2009 | radio tag distribution only | | | radio tag distribution only | | | radio tag distribution only | | | FDS 10-72 |
| | 2010 | 73,640 | 42,590 | 139,753 | 122,777 | 89,067 | 178,817 | 196,417 | 153,498 | 281,020 | FDS 13-05 |
| | 2011 | 133,000 | 104,000 | 194,000 | 86,000 | 72,000 | 104,000 | 219,000 | 185,000 | 285,000 | <i>In prep</i> |
| | 2012 | 95,000 | 49,000 | 185,000 | 96,000 | 78,000 | 119,000 | 191,000 | 144,000 | 281,000 | <i>In prep</i> |
| | 2013 | 130,026 | 100,411 | 193,403 | not done | | | not done | | | AEA 2014 |
| | 2014 | abundance and distribution under way | | | abundance only under way | | | | | | |
| Chum | 2009 | radio tag distribution only | | | radio tag distribution only | | | radio tag distribution only | | | FDS 10-72 |
| | 2010 | 151,127 | 103,911 | 251,314 | 205,869 | 150,499 | 268,455 | 356,996 | 284,573 | 476,270 | FDS 13-05 |
| | 2011 | 1,468,000 | 1,283,000 | 1,747,000 | 284,000 | 257,000 | 342,000 | 1,752,000 | 1,557,000 | 2,073,000 | <i>In prep</i> |
| | 2012 | 233,000 | 146,000 | 526,000 | 101,000 | 66,000 | 219,000 | 334,000 | 213,000 | 744,000 | <i>In prep</i> |
| Chinook | 2012 | radio tag distribution only | | | radio tag distribution only | | | not done | | | AEA 2013 |
| | 2013 | 89,463 | 77,720 | 114,954 | radio tag distribution only | | | not done | | | AEA 2014 |
| | 2014 | abundance and distribution under way | | | abundance and distribution under way | | | abundance and distribution under way | | | |
| Pink | 2013 | radio tag distribution only | | | no studies | | | not done | | | AEA 2014 |
| | 2014 | radio tag distribution only | | | no studies | | | not done | | | |

^a All abundances were obtained by mark-recapture methods. A weighted distribution of spawners was calculated if the abundance estimate was available.

^b Mainstream Susitna River = the Susitna River drainage upstream of the Yentna River confluence.

^c FDS = Fishery Data Series report published by ADF&G, Anchorage; FDS 07-83 is Yanusz et al. 2007; FDS 10-72 is Merizon et al. 2010; FDS 11-12 is Yanusz et al. 2011a; FDS 11-19 is Yanusz et al. 2011b; FDS 13-05 is Cleary et al. 2013; *In prep* = pending FDS report; AEA 2013 = Yanusz, R.J., P.Cleary, S.Ivey, J.W. Erickson, D.J. Reed, R. Neustel, and J. Bullock. 2013. Distribution of spawning Susitna River Chinook *Oncorhynchus tshawytscha* and pink salmon *O. gorbuscha*, 2012. Alaska Energy Authority. Susitna-Watana Hydroelectric Project. Anchorage; AEA 2014 = LGL Research Associates, Inc., and Alaska Department of Fish and Game, Division of Sport Fish. 2014. Initial Study Report Part A: Sections 1–6, 8–10. Susitna-Watana Hydroelectric Project, Anchorage.

Table 26.—Estimated harvests of Chinook salmon of North Cook Inlet origin by all user groups, 1893–2013.

| 1893–1933 | | 1934–1973 | | 1974–2013 | |
|-----------|---------|-----------|---------|-----------|---------|
| Year | Harvest | Year | Harvest | Year | Harvest |
| 1893 | 24,000 | 1934 | 57,903 | 1974 | 238 |
| 1894 | 12,400 | 1935 | 60,060 | 1975 | 301 |
| 1895 | 20,159 | 1936 | 64,850 | 1976 | 692 |
| 1896 | 14,461 | 1937 | 68,786 | 1977 | 5,446 |
| 1897 | 11,266 | 1938 | 46,130 | 1978 | 4,430 |
| 1898 | 13,111 | 1939 | 42,181 | 1979 | 9,837 |
| 1899 | 13,682 | 1940 | 50,413 | 1980 | 11,301 |
| 1900 | 21,346 | 1941 | 83,858 | 1981 | 11,372 |
| 1901 | 27,455 | 1942 | 76,144 | 1982 | 17,146 |
| 1902 | 39,210 | 1943 | 89,105 | 1983 | 18,621 |
| 1903 | 52,818 | 1944 | 68,168 | 1984 | 23,842 |
| 1904 | 24,058 | 1945 | 55,362 | 1985 | 25,461 |
| 1905 | 14,134 | 1946 | 51,425 | 1986 | 43,327 |
| 1906 | 17,936 | 1947 | 85,443 | 1987 | 40,391 |
| 1907 | 50,355 | 1948 | 84,797 | 1988 | 44,263 |
| 1908 | 27,019 | 1949 | 89,025 | 1989 | 50,917 |
| 1909 | 47,699 | 1950 | 130,274 | 1990 | 42,414 |
| 1910 | 39,222 | 1951 | 150,010 | 1991 | 42,641 |
| 1911 | 44,676 | 1952 | 59,600 | 1992 | 51,650 |
| 1912 | 38,293 | 1953 | 71,544 | 1993 | 54,489 |
| 1913 | 50,922 | 1954 | 52,260 | 1994 | 35,516 |
| 1914 | 38,043 | 1955 | 37,199 | 1995 | 22,182 |
| 1915 | 67,034 | 1956 | 52,248 | 1996 | 22,984 |
| 1916 | 50,316 | 1957 | 34,214 | 1997 | 24,497 |
| 1917 | 52,399 | 1958 | 18,278 | 1998 | 26,569 |
| 1918 | 27,909 | 1959 | 26,226 | 1999 | 37,634 |
| 1919 | 19,041 | 1960 | 22,031 | 2000 | 37,344 |
| 1920 | 31,650 | 1961 | 15,822 | 2001 | 33,833 |
| 1921 | 11,157 | 1962 | 16,216 | 2002 | 29,986 |
| 1922 | 24,824 | 1963 | 14,106 | 2003 | 31,590 |
| 1923 | 23,929 | 1964 | 3,698 | 2004 | 31,244 |
| 1924 | 21,610 | 1965 | 7,801 | 2005 | 33,124 |
| 1925 | 40,826 | 1966 | 815 | 2006 | 34,092 |
| 1926 | 60,496 | 1967 | 623 | 2007 | 30,555 |
| 1927 | 69,923 | 1968 | 1,163 | 2008 | 21,278 |
| 1928 | 55,908 | 1969 | 3,927 | 2009 | 13,530 |
| 1929 | 54,155 | 1970 | 1,853 | 2010 | 13,155 |
| 1930 | 57,854 | 1971 | 10,494 | 2011 | 12,683 |
| 1931 | 41,122 | 1972 | 5,748 | 2012 | 4,974 |
| 1932 | 56,745 | 1973 | 246 | 2013 | 5,208 |
| 1933 | 47,425 | | | | |

Source: SWHS for the Division of Sport Fish, data archived with the Division of Commercial Fisheries and the Division of Subsistence.

Table 27.—Estimated harvests of Chinook salmon originating from the Northern Cook Inlet Management Area by each user group, 1977–2013.

| Year | Commercial ^a | | | Sport ^b | | | | | Subsistence ^d | Grand total |
|------|-------------------------|-----------|--------|--------------------|------------------|------------------|-----------------|--------|--------------------------|-------------|
| | NCI ^c | Kus-tatan | Total | Knik Arm drainages | Eastside Susitna | Westside Susitna | West Cook Inlet | Total | | |
| 1977 | 565 | 207 | 772 | 207 | 1,056 | 2,938 | 473 | 4,674 | | 5,446 |
| 1978 | 666 | 221 | 887 | 140 | 886 | 2,039 | 478 | 3,543 | | 4,430 |
| 1979 | 1,714 | 159 | 1,873 | 800 | 1,298 | 5,768 | 98 | 7,964 | | 9,837 |
| 1980 | 993 | 174 | 1,167 | 646 | 1,370 | 6,148 | 34 | 8,198 | 1,757 | 11,301 |
| 1981 | 725 | 43 | 768 | 1,466 | 2,202 | 4,742 | 192 | 8,602 | 2,002 | 11,372 |
| 1982 | 2,716 | 391 | 3,107 | 1,666 | 2,063 | 8,573 | 147 | 12,449 | 1,590 | 17,146 |
| 1983 | 933 | 163 | 1,096 | 1,255 | 2,852 | 9,568 | 1,185 | 14,860 | 2,665 | 18,621 |
| 1984 | 1,004 | 214 | 1,218 | 2,057 | 4,428 | 12,106 | 1,833 | 20,424 | 2,200 | 23,842 |
| 1985 | 1,890 | 195 | 2,085 | 1,889 | 4,342 | 13,644 | 2,029 | 21,904 | 1,472 | 25,461 |
| 1986 | 15,488 | 290 | 15,778 | 1,524 | 8,569 | 13,402 | 2,378 | 25,873 | 1,676 | 43,327 |
| 1987 | 12,700 | 175 | 12,875 | 2,476 | 8,603 | 13,350 | 1,477 | 25,906 | 1,610 | 40,391 |
| 1988 | 12,836 | 120 | 12,956 | 2,916 | 9,139 | 15,970 | 1,695 | 29,720 | 1,587 | 44,263 |
| 1989 | 12,731 | 1,144 | 13,875 | 4,341 | 9,783 | 19,343 | 2,325 | 35,792 | 1,250 | 50,917 |
| 1990 | 9,582 | 1,082 | 10,664 | 2,022 | 9,423 | 17,425 | 2,097 | 30,967 | 781 | 42,412 |
| 1991 | 6,859 | 922 | 7,781 | 2,277 | 9,083 | 21,836 | 762 | 33,958 | 902 | 42,641 |
| 1992 | 4,554 | 963 | 5,517 | 3,969 | 21,307 | 18,737 | 1,213 | 45,226 | 907 | 51,650 |
| 1993 | 3,307 | 425 | 3,732 | 3,602 | 22,688 | 21,142 | 1,955 | 49,387 | 1,370 | 54,489 |
| 1994 | 3,193 | 449 | 3,642 | 4,303 | 14,970 | 10,248 | 1,583 | 31,104 | 770 | 35,516 |
| 1995 | 4,130 | 198 | 4,328 | 1,707 | 7,872 | 6,265 | 693 | 16,537 | 1,317 | 22,182 |
| 1996 | 1,958 | 148 | 2,106 | 1,579 | 11,023 | 5,879 | 1,358 | 19,839 | 1,039 | 22,984 |
| 1997 | 1,133 | 105 | 1,238 | 2,938 | 10,989 | 7,799 | 894 | 22,620 | 639 | 24,497 |
| 1998 | 2,547 | 83 | 2,630 | 2,031 | 10,472 | 9,716 | 693 | 22,912 | 1,027 | 26,569 |
| 1999 | 2,812 | 789 | 3,601 | 2,724 | 16,875 | 12,131 | 1,073 | 32,803 | 1,230 | 37,634 |
| 2000 | 2,307 | 778 | 3,085 | 2,824 | 11,774 | 17,341 | 1,163 | 33,102 | 1,157 | 37,344 |
| 2001 | 1,811 | 651 | 2,462 | 2,255 | 13,504 | 13,914 | 722 | 30,395 | 976 | 33,833 |
| 2002 | 1,895 | 537 | 2,432 | 3,195 | 10,695 | 11,357 | 1,227 | 26,474 | 1,080 | 29,986 |
| 2003 | 1,683 | 504 | 2,187 | 2,562 | 9,499 | 15,035 | 1,124 | 28,220 | 1,183 | 31,590 |
| 2004 | 1,926 | 430 | 2,356 | 2,556 | 8,498 | 15,694 | 795 | 27,543 | 1,345 | 31,244 |
| 2005 | 3,373 | 87 | 3,460 | 3,692 | 8,453 | 15,945 | 592 | 28,682 | 982 | 33,124 |
| 2006 | 4,261 | 244 | 4,505 | 3,813 | 7,339 | 16,454 | 1,038 | 28,644 | 943 | 34,092 |
| 2007 | 3,818 | 43 | 3,861 | 4,326 | 8,337 | 11,370 | 1,380 | 25,413 | 1,281 | 30,555 |
| 2008 | 3,983 | 198 | 4,181 | 2,843 | 5,834 | 6,805 | 437 | 15,919 | 1,178 | 21,278 |
| 2009 | 1,631 | 107 | 1,738 | 2,152 | 3,462 | 4,713 | 829 | 11,156 | 636 | 13,530 |
| 2010 | 1,750 | 52 | 1,802 | 1,076 | 2,274 | 6,306 | 854 | 10,510 | 843 | 13,155 |
| 2011 | 2,299 | 77 | 2,376 | 1,012 | 2,710 | 5,914 | 76 | 9,712 | 595 | 12,683 |
| 2012 | 1,049 | 65 | 1,114 | 292 | 203 | 2,525 | 0 | 3,020 | 840 | 4,974 |
| 2013 | 1,327 | 124 | 1,451 | 495 | 18 | 2,427 | 0 | 2,940 | 817 | 5,208 |

^a Source: Shields and Dupuis 2013.

^b Source: Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996. Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

^c “Northern District” total from Shields and Dupuis (2013).

^d Source: Shields and Dupuis 2013. Includes Tyonek subsistence fishery (1980–2003) and Northern and Central districts subsistence fisheries (1985, 1991–1993). Data for 1994–1995 include the Northern District.

Table 28.—Chinook salmon escapement goals for Northern Cook Inlet Management Area waters.

| Management unit | Drainage | Escapement goal range | Type ^a | Method of survey |
|------------------------|----------------------|-----------------------|-------------------|------------------|
| Knik Arm | Little Susitna River | 900–1,800 | SEG | Aerial |
| Eastside Susitna River | Chulitna River | 1,800–5,100 | SEG | Aerial |
| | Clear Creek | 950–3,400 | SEG | Aerial |
| | Goose Creek | 250–650 | SEG | Aerial |
| | Little Willow Creek | 450–1,800 | SEG | Aerial |
| | Montana Creek | 1,100–3,100 | SEG | Aerial |
| | Prairie Creek | 3,100–9,200 | SEG | Aerial |
| | Sheep Creek | 600–1,200 | SEG | Aerial |
| | Willow Creek | 1,600–2,800 | SEG | Aerial |
| | Deception Creek | No goal | | |
| Westside Susitna River | Alexander Creek | 2,100–6,000 | SEG | Aerial |
| | Deshka River | 13,000–28,000 | SEG | Weir |
| | Lake Creek | 2,500–7,100 | SEG | Aerial |
| | Peters Creek | 1,000–2,600 | SEG | Aerial |
| | Talachulitna River | 2,200–5,000 | SEG | Aerial |
| West Cook Inlet | Chuitna River | 1,200–2,900 | SEG | Aerial |
| | Lewis River | 250–800 | SEG | Aerial |
| | Theodore River | 500–1,700 | SEG | Aerial |

Source: Fair et al. 2013.

^a SEG means sustainable escapement goal.

Table 29.—Sport harvest of Chinook salmon from KAMU, 1977–2013.

| Year | Little Susitna River | Eklutna Tailrace | Other | Total |
|-----------|----------------------|------------------|-------|-------|
| 1977 | 191 | – | 16 | 207 |
| 1978 | 93 | – | 47 | 140 |
| 1979 | 800 | – | 0 | 800 |
| 1980 | 646 | – | 0 | 646 |
| 1981 | 1,418 | – | 48 | 1,466 |
| 1982 | 1,467 | – | 199 | 1,666 |
| 1983 | 1,187 | – | 68 | 1,255 |
| 1984 | 1,883 | – | 174 | 2,057 |
| 1985 | 1,845 | – | 44 | 1,889 |
| 1986 | 1,457 | – | 67 | 1,524 |
| 1987 | 2,282 | – | 194 | 2,476 |
| 1988 | 2,822 | – | 94 | 2,916 |
| 1989 | 4,204 | – | 137 | 4,341 |
| 1990 | 1,965 | – | 57 | 2,022 |
| 1991 | 2,102 | – | 175 | 2,277 |
| 1992 | 3,920 | – | 49 | 3,969 |
| 1993 | 3,441 | – | 161 | 3,602 |
| 1994 | 4,204 | – | 99 | 4,303 |
| 1995 | 1,698 | – | 9 | 1,707 |
| 1996 | 1,484 | – | 95 | 1,579 |
| 1997 | 2,938 | – | 0 | 2,938 |
| 1998 | 2,031 | – | 0 | 2,031 |
| 1999 | 2,713 | – | 11 | 2,724 |
| 2000 | 2,802 | – | 22 | 2,824 |
| 2001 | 2,243 | – | 12 | 2,255 |
| 2002 | 3,144 | – | 51 | 3,195 |
| 2003 | 2,138 | 399 | 25 | 2,562 |
| 2004 | 2,362 | 23 | 66 | 2,451 |
| 2005 | 2,724 | 941 | 27 | 3,692 |
| 2006 | 3,303 | 484 | 26 | 3,813 |
| 2007 | 3,210 | 1,084 | 32 | 4,326 |
| 2008 | 2,219 | 594 | 30 | 2,843 |
| 2009 | 1,653 | 499 | 0 | 2,152 |
| 2010 | 889 | 288 | 17 | 1,194 |
| 2011 | 828 | 184 | 0 | 1,012 |
| 2012 | 216 | 76 | 0 | 292 |
| <hr/> | | | | |
| Average | | | | |
| 1977–2012 | 2,070 | 457 | 57 | 2,254 |
| 2008–2012 | 1,161 | 328 | 9 | 1,499 |
| <hr/> | | | | |
| 2013 | 336 | 159 | 0 | 495 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

Note: An en dash means data were not available.

Table 30.—Escapement of Chinook salmon, KAMU, 1977–2013.

| Year | Little Susitna River | | Moose Creek ^a |
|-----------|----------------------|--------------------|--------------------------|
| | Weir | Aerial | |
| 1979 | ND | ^b | 253 |
| 1980 | ND | ^b | ^b |
| 1981 | ND | ^b | 238 |
| 1982 | ND | ^b | 406 |
| 1983 | ND | 929 | 452 |
| 1984 | ND | 558 | 541 |
| 1985 | ND | 1,005 | 475 |
| 1986 | ND | ^b | 419 |
| 1987 | ND | 1,386 | 957 |
| 1988 | 7,374 | 3,197 | 1,072 |
| 1989 | 4,367 | ^b | 999 |
| 1990 | ND | 922 | 545 |
| 1991 | ND | 892 | 704 |
| 1992 | ND | 1,441 | 959 |
| 1993 | ND | ^{bc} | 175 ^d |
| 1994 | 2,981 | 1,221 ^c | 894 |
| 1995 | 2,809 | 1,714 ^c | 488 |
| 1996 | ND | 1,079 ^c | 652 |
| 1997 | ND | ^{bc} | 652 |
| 1998 | ND | 1,091 ^c | 214 |
| 1999 | ND | ^{bc} | 744 |
| 2000 | ND | 1,094 ^c | 198 |
| 2001 | ND | 1,238 ^c | 275 |
| 2002 | ND | 1,660 ^e | 310 |
| 2003 | ND | 1,114 ^e | 471 |
| 2004 | ND | 1,694 ^e | 197 |
| 2005 | ND | 2,095 ^e | 254 |
| 2006 | ND | 1,855 ^e | 216 |
| 2007 | ND | 1,731 ^e | 330 |
| 2008 | ND | 1,297 ^e | 384 |
| 2009 | ND | 1,028 ^e | 201 |
| 2010 | ND | 589 ^e | 142 |
| 2011 | ND | 887 ^e | 175 |
| 2012 | ND | 1,154 ^e | 163 |
| Average | | | |
| 1983–2012 | | 1,315 | 475 |
| 2003–2012 | | 1,344 | 253 |
| 2008–2012 | | 991 | 213 |
| 2013 | 2,379 ^f | 1,651 ^e | 257 |

Note: ND means no data.

^a Foot survey (1977–1994); helicopter survey (1995–2006).

^b No count conducted; water too turbid.

^c Biological Escapement Goal (BEG) is 850 fish.

^d Late count.

^e Sustainable Escapement Goal (SEG) is 900–1,800 fish.

^f Incomplete count due to high water.

Table 31.—Chinook salmon smolt stocked and adult sport fish harvest at Eklutna Tailrace from 2002–2013.

| Year | Brood year | Total smolt released | Mark type ^a | Mean weight (g) | Release date | Brood stock | Hatchery | Harvest |
|------|-------------------|----------------------|------------------------|--------------------------------|--------------|-------------|---------------------|---------|
| 2002 | 2001 | 106,991 | TM | 11.3 | 20 May | Ship Creek | Elmendorf | 0 |
| 2003 | 2002 | 218,492 | TM | 12.8 (50.05%) 12.0 (49.95%) | 3–4 June | Ship Creek | Fort Richardson | 399 |
| 2004 | 2002 ^b | 215,165 | TM | 13.4 | 19 May | Ship Creek | Fort Richardson | 23 |
| 2005 | 2003 ^b | 164,586 | TM | 14.0 | 1 Jun | Ship Creek | Fort Richardson | 941 |
| 2006 | 2004 ^b | 213,250 | TM | 10.6 | 31 May–1 Jun | Ship Creek | Fort Richardson | 484 |
| 2007 | 2005 ^b | 110,978 | TM | 8.9 | 30 May | Ship Creek | Fort Richardson | 1,084 |
| 2008 | 2006 ^b | 114,136 | TM | 9.1 | 27 May | Ship Creek | Fort Richardson | 594 |
| 2009 | 2007 ^b | 77,785 | TM | 7.1 | 8 Jun | Ship Creek | Fort Richardson | 499 |
| 2010 | 2008 ^b | 152,014 | TM | 9.1 | 19 Jun | Ship Creek | Fort Richardson | 168 |
| 2011 | 2009 ^b | 122,962 | TM | 11.0 | 31 May | Ship Creek | Fort Richardson | 184 |
| 2012 | 2011 | 160,347 | TM | 13.5 | 29 May | Ship Creek | WJHSFH ^c | 76 |
| 2013 | 2012 | 94,609 | TM | 15.9 | 18 Jun | Ship Creek | WJHSFH ^c | 159 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

^a TM means thermal mark.

^b Cold water rearing conditions required growth over 2 winters to reach optimal release size.

^c William Jack Hernandez Sport Fish Hatchery.

Table 32.—Sport harvest of Chinook salmon from the NCIMA management units: Eastside Susitna River, Westside Susitna River, West Cook Inlet, and Knik Arm drainages, 1979–2013.

| Year | Eastside Susitna River | | | Westside Susitna River | West Cook Inlet | Knik Arm | Total |
|-----------|------------------------|-------------|--------|------------------------|-----------------|----------|--------|
| | Hatchery | Nonhatchery | Total | | | | |
| 1979 | | | 1,298 | 5,768 | 98 | 800 | 7,964 |
| 1980 | | | 1,370 | 6,148 | 34 | 646 | 8,198 |
| 1981 | | | 2,202 | 4,742 | 192 | 1,466 | 8,602 |
| 1982 | | | 2,063 | 8,573 | 147 | 1,666 | 12,449 |
| 1983 | | | 2,852 | 9,568 | 1,185 | 1,255 | 14,860 |
| 1984 | | | 4,428 | 12,106 | 1,833 | 2,057 | 20,424 |
| 1985 | | | 4,342 | 13,644 | 2,029 | 1,889 | 21,904 |
| 1986 | | | 8,569 | 13,402 | 2,378 | 1,524 | 25,873 |
| 1987 | | | 8,603 | 13,350 | 1,477 | 2,476 | 25,906 |
| 1988 | 355 | 8,784 | 9,139 | 15,970 | 1,695 | 2,916 | 29,720 |
| 1989 | 1,079 | 8,704 | 9,783 | 19,343 | 2,325 | 4,341 | 35,792 |
| 1990 | 1,194 | 8,229 | 9,423 | 17,425 | 2,097 | 2,022 | 30,967 |
| 1991 | 844 | 8,239 | 9,083 | 21,836 | 762 | 2,277 | 33,958 |
| 1992 | 4,566 | 16,741 | 21,307 | 18,737 | 1,213 | 3,969 | 45,226 |
| 1993 | 3,977 | 18,711 | 22,688 | 21,142 | 1,955 | 3,602 | 49,387 |
| 1994 | 2,703 | 12,267 | 14,970 | 10,248 | 1,583 | 4,303 | 31,104 |
| 1995 | 1,111 | 6,761 | 7,872 | 6,265 | 693 | 1,707 | 16,537 |
| 1996 | 1,205 | 9,818 | 11,023 | 5,879 | 1,358 | 1,579 | 19,839 |
| 1997 | 1,091 | 9,898 | 10,989 | 7,799 | 894 | 2,938 | 22,620 |
| 1998 | 902 | 9,570 | 10,472 | 9,716 | 693 | 2,031 | 22,912 |
| 1999 | 2,464 | 14,411 | 16,875 | 12,131 | 1,073 | 2,724 | 32,803 |
| 2000 | 1,776 | 9,998 | 11,774 | 17,341 | 1,163 | 2,824 | 33,102 |
| 2001 | 2,057 | 11,447 | 13,504 | 13,914 | 722 | 2,255 | 30,395 |
| 2002 | 1,720 | 8,975 | 10,695 | 11,357 | 1,227 | 3,195 | 26,474 |
| 2003 | 1,605 | 7,894 | 9,499 | 15,035 | 1,124 | 2,562 | 28,220 |
| 2004 | 969 | 7,529 | 8,498 | 15,694 | 795 | 2,556 | 27,543 |
| 2005 | 981 | 7,472 | 8,453 | 15,945 | 592 | 3,692 | 28,682 |
| 2006 | ^a | 7,339 | 7,339 | 16,454 | 1,038 | 3,813 | 28,644 |
| 2007 | ^a | 8,337 | 8,337 | 11,370 | 1,380 | 4,326 | 25,413 |
| 2008 | ^a | 5,834 | 5,834 | 6,805 | 437 | 2,843 | 15,919 |
| 2009 | ^a | 3,655 | 3,655 | 4,713 | 829 | 2,152 | 11,156 |
| 2010 | ^a | 2,588 | 2,588 | 6,306 | 854 | 1,076 | 10,824 |
| 2011 | ^a | 2,710 | 2,710 | 5,914 | 76 | 1,012 | 9,712 |
| 2012 | ^a | 203 | 203 | 2,525 | 0 | 292 | 3,020 |
| Average | | | | | | | |
| 2003–2012 | 1,466 | 8,615 | 5,712 | 10,076 | 713 | 2,432 | 18,913 |
| 2008–2012 | | | 2,998 | 5,253 | 439 | 1,475 | 10,126 |
| 2013 | ^a | 18 | 18 | 2,427 | 0 | 495 | 2,940 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

^a Hatchery contribution no longer available. Creel program concluded in 2005.

Table 33.—Contribution of hatchery-reared Chinook salmon to the sport harvest at Willow Creek and the escapements at Willow and Deception creeks, 2005–2013.

| Year | Brood year (age) | Willow Creek | | | | | | Deception Creek | | |
|-------------------|---------------------|----------------------|-------------|-----------------------|-------------------------|-------------|-----------------------|-------------------------|-------------|-----------------------|
| | | Harvest ^a | | | Escapement ^b | | | Escapement ^b | | |
| | | <i>n</i> | # Recovered | Contrib. ^c | <i>n</i> | # Recovered | Contrib. ^c | <i>n</i> | # Recovered | Contrib. ^c |
| 2005 | 2000 (0.4) | | 63 | 7.0% | | 0 | 0.0% | | ND | ND |
| | 2001 (0.3) | | 272 | 29.9% | | 2 | 0.9% | | ND | ND |
| | 2002 (0.2) | | 6 | 0.7% | | 0 | 0.0% | | ND | ND |
| | 2002 (1.1) | | 2 | 0.2% | | 0 | 0.0% | | ND | ND |
| | 2003 (0.1) | | 18 | 2.0% | | 0 | 0.0% | | ND | ND |
| | Total | 965 | 361 | 39.8% ^d | 331 | 2 | 0.9% ^d | 174 | 113 | 64.9% ^e |
| 2006 ^f | 2001 (0.4) | | ND | ND | | 1 | 0.4% | | ND | ND |
| | 2002 (0.3) | | ND | ND | | 0 | 0.0% | | ND | ND |
| | 2003 (1.1) | | ND | ND | | 1 | 0.4% | | ND | ND |
| | 2003 (0.1) | | ND | ND | | 1 | 0.4% | | ND | ND |
| | Total | ND | ND | ND | 277 | 3 | 1.1% ^d | 248 | 151 | 60.9% ^e |
| 2007 | 2003 (1.2) | | ND | ND | | 1 | 0.7% | | | |
| | Total | ND | ND | ND | 274 | 1 | 0.7% ^d | 258 | 175 | 67.8% ^e |
| 2008 | | ND | ND | ND | 118 | 3 | 2.5% | 156 | 105 | 67.3% ^e |
| 2009 | | ND | ND | ND | 117 | 4 | 3.4% | 96 | 46 | 50.0% ^e |
| 2010 | | ND | ND | ND | 104 | 2 | 1.9% | 25 | 7 | 28.0% ^e |
| 2011 | | ND | ND | ND | 101 | 1 | 1.0% | 8 | 4 | 50.0% |
| 2012 | | ND | ND | ND | 66 | 3 | 4.5% | 44 | 9 | 20.5% ^e |
| 2013 | | ND | ND | ND | 139 | 1 | 0.7% | 330 | 47 | 14.2% ^e |

Source: ADF&G unpublished staff foot survey data.

Note: *n* = total number of fish sampled; # Recovered = number of adipose finclipped (hatchery reared) fish with coded wire tags recovered at the ADF&G Mark, Tag, and Age Lab; Contrib. = percent contribution; ND = no data because no attempts were made to collect it.

^a Creel survey.

^b Carcass sampling.

^c Percent contribution may differ from the quotient of number recovered to number sampled due to head or tag loss.

^d Sum of contribution by brood year. Tags from the heads of adipose finclipped fish were decoded at the ADF&G Mark, Tag, and Age Lab in Juneau, AK.

^e The ratio of adipose finclipped (marked) fish to total fish inspected during a carcass survey.

^f The Willow Creek creel survey was discontinued in 2006; no sport fish harvests on this stream were sampled that year.

Table 34.—Number of Chinook salmon smolt stocked in Willow Creek drainage, 1985–2013.

| Brood year | Release date | Release location ^a | Total number released | Number coded wire tagged | Mean weight (g) |
|-------------------|--------------------|-------------------------------|-----------------------|--------------------------|-----------------|
| 1983 | 13 Jun 1985 | Deception | 101,256 | 8,152 | 18.0 |
| 1984 | 11–12 Jun 1985 | Deception | 214,384 | 11,038 | 13.8 |
| | 20 Jun 1985 | Deception | 218,743 | 10,708 | 14.0 |
| 1985 | 1 May 1986 | Deception | 49,668 | 9,933 | 16.7 |
| | 10 May 1986 | Deception | 127,904 | 18,400 | 12.2 |
| | 10 May 1986 | Deception | 147,877 | | 11.4 |
| | Total | | 325,449 | 28,333 | |
| 1987 | 12 Jul 1988 | Deception | 201,091 | 20,936 | 10.9 |
| 1988 | 31 May 1989 | Deception | 240,885 | 19,851 | 13.0 |
| 1989 | 24 May 1990 | Deception | 219,362 | 41,570 | 14.4 |
| | 24 May 1990 | Deception | 219,432 | 40,575 | 13.4 |
| | 24 May 1990 | Deception | 216,697 | 40,438 | 13.9 |
| | Total | | 655,491 | 122,583 | |
| 1990 | 21 May 1991 | Deception | 168,777 | | 11.2 |
| | 31 May 1991 | Deception | 70,258 | 31,167 | 12.3 |
| | 28 May 1991 | Willow | 73,756 | | 12.3 |
| | 30 May 1991 | Willow | 78,878 | 31,167 | 12.3 |
| | Total | | 391,669 | 62,334 | |
| 1991 | 29 May 1992 | Deception | 179,724 | 33,464 | 13.5 |
| | 9 Jun 1992 | Deception | 35,752 | | 14.5 |
| | Total | | 215,476 | 33,464 | |
| 1992 | 1 Jun 1993 | Deception | 160,194 | 39,420 | 14.9 |
| 1993 | 24–25 May 1994 | Deception | 177,913 | 45,921 | 13.3 |
| 1994 | 25 May 1995 | Deception | 184,740 | 46,256 | 13.5 |
| 1995 | 12–17 Jun 1996 | Deception | 186,918 | 47,145 | 14.4 |
| 1996 | 11–20 Jun 1997 | Deception | 209,944 | 207,973 | 12.2 |
| 1997 | 17–26 Jun 1998 | Deception | 197,392 | 195,615 | 11.5 |
| 1998 | 14, 16–17 Jun 1999 | Deception | 201,586 | 199,772 | 11.5 |
| 1999 ^b | | Deception | 7,500 | | |
| | | Deception | 198,996 | | |
| | 2, 13–14 Jun 2000 | Total | 206,946 | 205,051 | 12.6 |

-continued-

Table 34.–Page 2 of 2.

| Brood year | Release date | Release location ^a | Total number released | Number coded wire tagged | Mean weight (g) |
|------------|----------------|-------------------------------|-----------------------|--------------------------|-----------------|
| 2000 | 18–19 Jun 2001 | Deception | 207,465 | 204,560 | 14.2 |
| 2001 | 21,24 Jun 2002 | Deception | 197,277 | 196,608 | 12.1 |
| 2002 | 19 Jun 2003 | Deception | 100,635 | 101,407 | 14.5 |
| | 8 Jun 2004 | Deception | 113,523 | 104,101 | 12.2 |
| | | Total | 214,158 | 205,508 | |
| 2003 | 9 Jun 2004 | Deception | 99,047 | 97,660 | 15.7 |
| | 6 Jun 2005 | Deception | 163,016 | 162,415 | 12.6 |
| | | Total | 262,063 | 260,075 | |
| 2004 | 8 Jun 2006 | Deception | 50,426 | 50,376 | 12.5 |
| 2005 | 29 May 2007 | Deception | 103,016 | 103,016 | 9.5 |
| 2006 | 16 Jun 2008 | Deception | 112,219 | 111,321 | 11.0 |
| 2007 | 4 Jun 2009 | Deception | 111,322 | 111,322 | 6.8 |
| 2008 | 27 May 2010 | Deception | 155,125 | 155,125 | 8.4 |
| 2009 | 6 Jul 2011 | Deception | 47,428 | 47,428 ^c | 12.7 |
| | 6 Jul 2011 | Deception | 92,838 | 0 ^c | 12.4 |
| | | Total | 140,266 | | |
| 2010 | 9 Jul 2012 | Deception | 151,220 | | 17.0 |
| 2012 | 12 Jun 2013 | Deception | 149,041 | 149,041 ^c | 17.0 |

Source: ADF&G unpublished hatchery records.

^a Prior to 1996, the Deception Creek release site was at the mouth of Deception Creek. Beginning in 1996, the release site was at the Four Mile Road crossing.

^b In 2000, the stocking truck got stuck on Four Mile Road. Approximately 7,500 smolt were bucketed to Deception Creek at Four Mile Road, the remaining smolt were released at Hatcher Pass Road Bridge near the mouth of Deception Creek.

^c Number of fish adipose finclipped and thermal marked.

Table 35.—Eastside Susitna River Management Unit Chinook salmon harvest by fishery, 1977–2013.

| Year | Willow Creek | Little Willow Creek | Kashwitna River | Caswell Creek | Sheep Creek | Goose Creek | Montana Creek | Birch Creek | Sunshine Creek | Talkeetna River ^a | Other ^b | Total |
|------|--------------|---------------------|-----------------|---------------|-------------|-------------|---------------|-------------|----------------|------------------------------|--------------------|--------|
| 1977 | 137 | 16 | | | 259 | | 415 | | | 25 | 204 | 1,056 |
| 1978 | 47 | 0 | | | 256 | | 408 | | | 12 | 163 | 886 |
| 1979 | 459 | 0 | | 156 | 10 | | 312 | | 10 | 312 | 39 | 1,298 |
| 1980 | 289 | 32 | | 215 | 45 | | 559 | | 13 | 172 | 45 | 1,370 |
| 1981 | 585 | 0 | | 249 | 0 | | 661 | | 57 | 373 | 277 | 2,202 |
| 1982 | 629 | 0 | | 471 | 0 | | 241 | | 52 | 450 | 220 | 2,063 |
| 1983 | 534 | 0 | 231 | 272 | 0 | | 504 | | 105 | 934 | 272 | 2,852 |
| 1984 | 774 | 37 | 0 | 586 | 0 | 0 | 1,522 | | 125 | 1,272 | 112 | 4,428 |
| 1985 | 1,063 | 25 | | 527 | 0 | | 979 | | 771 | 871 | 106 | 4,342 |
| 1986 | 1,017 | 872 | 73 | 327 | 1,778 | 145 | 2,796 | 290 | 327 | 908 | 36 | 8,569 |
| 1987 | 1,987 | 711 | 116 | 88 | 1,610 | 334 | 1,726 | 44 | 319 | 1,639 | 29 | 8,603 |
| 1988 | 2,349 | 937 | 0 | 578 | 1,847 | 218 | 1,070 | 28 | 303 | 1,762 | 47 | 9,139 |
| 1989 | 2,846 | 507 | 11 | 357 | 1,116 | 385 | 1,708 | 28 | 368 | 2,372 | 85 | 9,783 |
| 1990 | 3,237 | 387 | 6 | 330 | 1,537 | 504 | 478 | | 465 | 2,358 | 121 | 9,423 |
| 1991 | 3,208 | 684 | 41 | 305 | 1,519 | 288 | 575 | 47 | 230 | 2,025 | 161 | 9,083 |
| 1992 | 8,884 | 1,023 | 16 | 592 | 2,663 | 1,033 | 3,078 | 101 | 365 | 3,338 | 214 | 21,307 |
| 1993 | 8,626 | 1,200 | 38 | 531 | 2,300 | 633 | 4,054 | 9 | 280 | 4,729 | 288 | 22,688 |
| 1994 | 5,980 | 745 | 78 | 562 | 1,349 | 361 | 3,111 | 108 | 297 | 2,144 | 235 | 14,970 |
| 1995 | 2,742 | 436 | 18 | 397 | 746 | 226 | 1,004 | 0 | 132 | 2,126 | 45 | 7,872 |
| 1996 | 2,690 | 896 | 21 | 128 | 1,397 | 437 | 1,612 | 22 | 53 | 3,585 | 182 | 11,023 |
| 1997 | 3,135 | 699 | 10 | 30 | 550 | 298 | 2,181 | 30 | 53 | 3,800 | 203 | 10,989 |
| 1998 | 2,793 | 546 | 15 | 226 | 700 | 348 | 1,471 | 83 | 116 | 3,846 | 328 | 10,472 |
| 1999 | 4,988 | 1,344 | 83 | 142 | 2,558 | 371 | 3,279 | 134 | 11 | 3,701 | 264 | 16,875 |
| 2000 | 3,782 | 578 | 160 | 561 | 851 | 258 | 1,728 | 223 | 472 | 2,740 | 421 | 11,774 |
| 2001 | 4,573 | 941 | 74 | 238 | 1,420 | 160 | 2,646 | 65 | 93 | 2,866 | 428 | 13,504 |
| 2002 | 3,591 | 580 | 217 | 115 | 928 | 403 | 2,026 | 35 | 38 | 2,616 | 146 | 10,695 |
| 2003 | 3,922 | 510 | 373 | 26 | 1,284 | 350 | 1,242 | 167 | 154 | 1,276 | 195 | 9,499 |
| 2004 | 2,818 | 445 | 125 | 23 | 914 | 335 | 1,071 | 0 | 25 | 2,473 | 25 | 8,254 |
| 2005 | 2,466 | 621 | 112 | 394 | 878 | 150 | 1,328 | 287 | 205 | 1,960 | 52 | 8,453 |

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Table 35.–Page 2 of 2.

| Year | Willow Creek | Little Willow Creek | Kashwitna River | Caswell Creek | Sheep Creek | Goose Creek | Montana Creek | Birch Creek | Sunshine Creek | Talkeetna River ^a | Other ^b | Total |
|-----------|--------------|---------------------|-----------------|---------------|-------------|-------------|---------------|-------------|----------------|------------------------------|--------------------|-------|
| 2006 | 2,141 | 449 | 210 | 264 | 707 | 27 | 1,672 | 97 | 211 | 1,561 | 0 | 7,339 |
| 2007 | 2,258 | 870 | 223 | 190 | 964 | 31 | 1,294 | 0 | 0 | 2,476 | 31 | 8,337 |
| 2008 | 1,101 | 505 | 237 | 30 | 589 | 134 | 1,188 | 46 | 431 | 1,479 | 94 | 5,834 |
| 2009 | 499 | 85 | 212 | 17 | 393 | 0 | 257 | 0 | 0 | 1,982 | 210 | 3,655 |
| 2010 | 218 | 169 | 214 | 0 | 153 | 0 | 371 | 26 | 56 | 1,013 | 368 | 2,588 |
| 2011 | 282 | 33 | 172 | 0 | 213 | 0 | 362 | 0 | 16 | 1,087 | 545 | 2,710 |
| 2012 | 13 | 0 | 8 | 0 | 0 | 0 | 13 | 0 | 0 | 113 | 56 | 203 |
| Average | | | | | | | | | | | | |
| 2003–2007 | 2,721 | 579 | 209 | 179 | 949 | 179 | 1,321 | 110 | 119 | 1,949 | 61 | 8,376 |
| 2008–2012 | 423 | 158 | 169 | 9 | 270 | 27 | 438 | 14 | 101 | 1,135 | 255 | 2,998 |
| 2013 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 18 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015).

Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Note: Blanks indicate no data available.

Table 36.—Northern Cook Inlet Management Area Chinook salmon escapement index counts (aerial), 1979–2013.

| Year | Susitna River | | | Knik Arm ^a | West Cook Inlet | NCIMA total |
|-----------|---------------|----------|--------|-----------------------|-----------------|-------------|
| | Eastside | Westside | Total | | | |
| 1979 | 5,082 | 39,552 | 44,634 | 253 | 2,540 | 47,427 |
| 1980 | No data | | | | | |
| 1981 | 7,419 | 2,025 | 9,444 | 238 | 3,601 | 13,283 |
| 1982 | 10,700 | 25,224 | 35,924 | 406 | 7,384 | 43,714 |
| 1983 | 17,859 | 42,850 | 60,709 | 1,381 | 5,562 | 67,652 |
| 1984 | 25,678 | 27,974 | 53,652 | 1,099 | 5,043 | 59,794 |
| 1985 | 18,177 | 38,932 | 57,109 | 1,480 | 4,619 | 63,208 |
| 1986 | 15,828 | 32,330 | 48,158 | 419 | 6,114 | 54,691 |
| 1987 | 26,535 | 23,936 | 50,471 | 2,343 | 2,423 | 55,237 |
| 1988 | 26,255 | 40,963 | 67,218 | 4,269 | 5,546 | 77,033 |
| 1989 | 23,117 | 4,818 | 27,935 | 999 | 2,468 | 31,402 |
| 1990 | 25,040 | 28,042 | 53,082 | 1,467 | 1,329 | 55,878 |
| 1991 | 21,773 | 19,425 | 41,198 | 1,596 | 1,348 | 44,142 |
| 1992 | 15,782 | 18,899 | 34,681 | 2,400 | 2,835 | 39,916 |
| 1993 | 13,066 | 18,028 | 31,094 | 175 | 3,882 | 35,151 |
| 1994 | 11,904 | 9,423 | 21,327 | 2,115 | 2,121 | 25,563 |
| 1995 | 21,778 | 15,828 | 37,606 | 2,202 | 2,223 | 42,031 |
| 1996 | 22,084 | 16,802 | 38,886 | 1,731 | 2,392 | 43,009 |
| 1997 | 35,927 | 38,437 | 74,364 | 652 | 5,087 | 80,103 |
| 1998 | 24,393 | 32,958 | 57,351 | 1,305 | 4,805 | 63,461 |
| 1999 | 24,306 | 30,260 | 54,566 | 744 | 7,812 | 63,122 |
| 2000 | 20,161 | 11,137 | 31,298 | 1,292 | 3,964 | 36,554 |
| 2001 | 23,047 | 15,102 | 38,149 | 1,513 | 4,394 | 44,056 |
| 2002 | 35,137 | 28,066 | 63,203 | 1,970 | 3,649 | 68,822 |
| 2003 | 15,341 | 24,294 | 39,635 | 1,585 | 4,974 | 46,194 |
| 2004 | 22,567 | 54,421 | 76,988 | 1,891 | 5,038 | 83,917 |
| 2005 | 21,780 | 27,774 | 49,554 | 2,349 | 2,730 | 54,633 |
| 2006 | 16,934 | 23,074 | 40,008 | 2,071 | 4,206 | 46,285 |
| 2007 | 23,229 | 18,645 | 41,874 | 2,061 | 2,439 | 46,374 |
| 2008 | 10,789 | 5,609 | 16,398 | 1,681 | 1,051 | 19,130 |
| 2009 | 12,686 | 9,971 | 22,657 | 1,229 | 1,622 | 25,508 |
| 2010 | 7,449 | 3,293 | 10,742 | 731 | 993 | 12,466 |
| 2011 | 8,936 | 13,324 | 22,260 | 1,062 | 659 | 23,981 |
| 2012 | 6,388 | 4,148 | 10,536 | 1,317 | 972 | 12,825 |
| Average | | | | | | |
| 1979–2012 | 18,701 | 22,593 | 41,294 | 1,455 | 3,510 | 46,259 |
| 2003–2012 | 14,610 | 18,455 | 33,065 | 1,598 | 2,468 | 37,131 |
| 2008–2012 | 9,250 | 7,269 | 16,519 | 1,204 | 1,059 | 18,782 |
| 2013 | 11,979 | 18,602 | 30,581 | 1,908 | 2,487 | 34,976 |

Source: Unpublished ADF&G aerial survey data.

Note: NCIMA means Northern Cook Inlet Management Area.

^a Majority from the Little Susitna River.

Table 37.—Eastside Susitna River Management Unit Chinook salmon escapement index counts (aerial), 1979–2013.

| Year | Willow Creek ^a | Deception Creek | | Little Willow Creek | Sheep Creek | Goose Creek | Montana Creek | Clear Creek | Prairie Creek | Chulitna River | Portage Creek | Indian River | Kash-witna River | Other ^b | Total |
|------|---------------------------|--------------------|--------------|---------------------|------------------|--------------|--------------------|--------------|---------------|----------------|---------------|--------------|------------------|--------------------|--------|
| | | Total | Non-hatchery | | | | | | | | | | | | |
| 1979 | 848 | 239 | | 327 | 778 | ^c | 1,094 ^d | 864 | ^c | ^c | 190 | 285 | 457 | ^c | 5,082 |
| 1980 | | | | | | | | | | | | | | | |
| 1981 | 991 | 366 | | 459 | 1,013 | 262 | 814 | ^c | 1,875 | ^c | 659 | 422 | 558 | ^c | 7,419 |
| 1982 | 592 | 229 ^e | | 316 | 527 | 140 | 887 ^d | 982 | 3,844 | 863 | 1,111 | 1,053 | 156 | 268 | 10,700 |
| 1983 | 777 | 121 ^e | | 1,042 | 975 | 477 | 1,641 ^d | 938 | 3,200 | 4,058 | 3,140 | 1,193 | 297 | ^c | 17,859 |
| 1984 | 2,789 | 675 ^e | | | 1,028 | 258 | 2,309 ^d | 1,520 | 9,000 | 4,191 | 2,341 | 1,456 | 111 | ^c | 25,678 |
| 1985 | 1,856 | 1,044 ^e | | 1,305 | 1,634 | 401 | 1,767 ^d | 2,430 | 6,500 | 783 | ^f | ^f | 457 | 4,066 | 18,177 |
| 1986 | 2,059 | 521 ^e | 364 | 2,133 | 1,285 | 630 | ^c | ^c | 8,500 | ^c | ^c | ^c | 700 | ^c | 15,828 |
| 1987 | 2,768 | 692 ^e | 518 | 1,320 | 895 | 416 | 1,320 ^d | ^c | 9,138 | 5,252 | 2,616 | 1,246 | 872 | ^c | 26,535 |
| 1988 | 2,496 | 790 ^e | 537 | 1,515 | 1,215 | 1,076 | 2,016 ^d | 4,850 | 9,280 | ^c | 1,402 | 456 | 1,159 | ^c | 26,255 |
| 1989 | 5,060 | 800 ^e | 623 | 1,325 | 610 | 835 | 2,701 ^d | ^c | 9,463 | ^c | 1,309 | 659 | 355 | ^c | 23,117 |
| 1990 | 2,365 | 700 ^e | 420 | 1,115 | 634 | 552 | 1,269 | 2,380 | 9,113 | 2,681 | 1,886 | 1,473 | 872 | ^c | 25,040 |
| 1991 | 2,006 | 747 ^e | 515 | 498 | 154 ^g | 968 | 1,215 | 1,974 | 6,770 | 4,410 | 1,223 | 1,468 | 340 | ^c | 21,773 |
| 1992 | 1,660 | 983 ^e | 423 | 673 | ^c | 369 | 1,560 | 1,530 | 4,453 | 2,527 | 1,078 | 479 | 470 | ^c | 15,782 |
| 1993 | 2,227 | 1,011 ^e | 502 | 705 | ^c | 347 | 1,281 | 886 | 3,023 | 2,070 | 629 | 362 | 525 | ^c | 13,066 |
| 1994 | 1,479 | 766 | 388 | 712 | 542 | 375 | 1,143 | 1,204 | 2,254 | 1,806 | 857 | 336 | 430 | ^c | 11,904 |
| 1995 | 3,792 | 834 | 445 | 1,210 | 1,049 | 374 | 2,110 | 1,928 | 3,884 | 3,460 | 1,505 | 796 | 836 | ^c | 21,778 |
| 1996 | 1,776 | 1,211 | 654 | 1,077 | 1,028 | 305 | 1,841 | 2,091 | 5,037 | 4,172 | 2,185 | 579 | 782 | ^c | 22,084 |
| 1997 | 4,841 | 1,340 | ^c | 2,390 | ^c | 308 | 3,073 | 5,100 | 7,710 | 5,618 | 3,086 | 1,700 | 761 | ^c | 35,927 |
| 1998 | 3,500 | 1,273 | 699 | 1,782 | 1,160 | 415 | 2,936 | 3,894 | 4,465 | 2,586 | 1,261 | 502 | 619 | ^c | 24,393 |
| 1999 | 2,081 | 1,000 | 801 | 1,837 | ^c | 268 | 2,088 | 2,216 | 5,871 | 5,455 | 1,797 | 1,049 | 644 | ^c | 24,306 |
| 2000 | 2,601 | 1,563 | 828 | 1,121 | 1,162 | 348 | 1,271 | 2,142 | 3,790 | 4,218 | 1,015 | 601 | 329 | ^c | 20,161 |

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Table 37.–Page 2 of 2.

| Year | Deception Creek | | | Little Willow Creek | Sheep Creek | Goose Creek | Montana Creek | Clear Creek | Prairie Creek | Chulitna River | Portage Creek | Indian River | Kashwitna River | Other ^b | Total |
|------------------|---------------------------|------------------|--------------------------|---------------------|---------------|-----------------|-----------------|---------------|-----------------|--------------------|------------------|--------------|-----------------|--------------------|--------|
| | Willow Creek ^a | Total | Non-hatchery | | | | | | | | | | | | |
| 2001 | 3,188 | 1,975 | 943 | 2,084 | ^c | ^c | 1,930 | 2,096 | 5,191 | 2,353 ^g | 2,334 | 1,292 | 604 | ^c | 23,047 |
| 2002 | 2,758 | 1,000 | 123 | 1,680 | 854 | 565 | 2,357 | 3,496 | 7,914 | 9,002 | 3,336 | 1,126 | 1,049 | ^c | 35,137 |
| 2003 | 3,964 | 914 | 288 | 879 | ^c | 175 | 2,576 | ^c | 4,095 | ^c | 827 ^d | 1,365 | 546 | ^c | 15,341 |
| 2004 | 2,985 | 480 | 170 | 2,227 | 285 | 417 | 2,117 | 3,417 | 5,570 | 2,162 | 1,972 | 593 | 342 | 652 | 22,567 |
| 2005 | 2,463 | 1,806 | 634 | 1,784 | 760 | 468 | 2,600 | 1,924 | 3,862 | 2,838 | 2,151 | 670 | 454 | 83 | 21,780 |
| 2006 | 2,217 | 940 | 368 | 816 | 580 | 306 | 1,850 | 1,520 | 3,570 | 2,862 | 942 | 718 | 613 | | 16,934 |
| 2007 | 1,373 | 604 | 194 | 1,103 | 400 | 105 | 1,936 | 3,310 | 5,036 | 5,166 | 2,284 | 1,017 | 895 | | 23,229 |
| 2008 | 1,255 ^g | 255 ^g | | ^c | ^c | 117 | 1,357 | 1,795 | 3,039 | 2,514 | 169 | 288 | ^c | | 10,789 |
| 2009 | 1,133 | ^c | | 776 | 500 | 65 ^h | 1,460 | 1,205 | 3,500 | 2,093 | 1,228 | 409 | 317 | | 12,686 |
| 2010 | 1,173 | | | 468 | ^c | 76 ^h | 755 | 903 | 3,022 | 1,052 | | | ^c | | 7,449 |
| 2011 | 1,061 | 180 | | 713 | 350 | 80 | 494 | 512 | 2,038 | 1,875 | 1,217 | 282 | 134 | | 8,936 |
| 2012 | 756 | 349 | | 494 | 363 | 57 | 416 | 1,177 | 1,185 | 667 | 501 | 338 | 85 | | 6,388 |
| Average | | | | | | | | | | | | | | | |
| 1979–2012 | 2,209 | 820 | 497 | 1,158 | 791 | 373 | 1,693 | 2,082 | 5,162 | 3,212 | 1,542 | 807 | 541 | 1,014 | 18,151 |
| 2003–2012 | 1,838 | 691 | 331 | 1,029 | 463 | 187 | 1,556 | 1,751 | 3,492 | 2,359 | 1,255 | 631 | 423 | 245 | 14,610 |
| 2008–2012 | 1,076 | 261 | | 613 | 404 | 79 | 896 | 1,118 | 2,557 | 1,640 | 779 | 329 | 179 | | 9,250 |
| 2013 | 1,752 | 350 | | 858 | ^c | 62 | 1,304 | 1,471 | 3,304 | 1,262 | 868 | 332 | 234 | | 11,797 |
| SEG ⁱ | 1,600– 2,800 | | 350– 700 ^j | 450– 1,800 | 600– 1,200 | 250– 650 | 1,100– 3,100 | 950– 3,400 | 3,100– 9,200 | 1,800– 5,100 | | | | | |

Source: ADF&G staff surveys.

- ^a Includes hatchery fish.
- ^b May include Honolulu, Byers, Troublesome, Bunco, Birch, Sunshine, Larson creeks.
- ^c No counts conducted due to poor water visibility.
- ^d Foot survey.
- ^e Combination of foot surveys and weir counts.
- ^f Included with other streams.
- ^g Poor count due to timing, poor visibility, or weather conditions.
- ^h Beaver dam blocks fish passage.
- ⁱ SEG = sustainable escapement goal.
- ^j Deception Creek SEG discontinued after 2005.

Table 38.—Westside Susitna River drainage Chinook salmon harvest by fishery, 1977–2013.

| Year | Alexander Creek | Deshka River | Rabideux Creek | Yentna River | Peters Creek | Lake Creek | Fish Creek ^a | Talachulitna River | Other streams ^b | Other lakes ^b | Total |
|------|--------------------|-----------------|-------------------|-----------------|-----------------|---------------|----------------------------|-----------------------|-------------------------------|-----------------------------|--------|
| 1977 | 820 | 1,017 | | | | 464 | | 224 | 413 | 0 | 2,938 |
| 1978 | 769 | 850 | | | | 326 | | 12 | 82 | 0 | 2,039 |
| 1979 | 712 | 2,811 | | | | 1,796 | | 293 | 156 | 0 | 5,768 |
| 1980 | 1,438 | 3,685 | | | | 775 | | 121 | 129 | 0 | 6,148 |
| 1981 | 1,121 | 2,769 | | | | 795 | | 57 | 0 | 0 | 4,742 |
| 1982 | 2,506 | 4,307 | | | | 1,645 | | 0 | 115 | 0 | 8,573 |
| 1983 | 1,711 | 4,889 | | | | 2,423 | | 336 | 209 | 0 | 9,568 |
| 1984 | 2,107 | 5,699 | | | 112 | 2,881 | | 424 | 709 | 174 | 12,106 |
| 1985 | 2,761 | 6,407 | | | | 2,575 | | 224 | 1,677 | 0 | 13,644 |
| 1986 | 2,937 | 6,490 | | | | 2,134 | 647 | 201 | 948 | 45 | 13,402 |
| 1987 | 2,224 | 5,632 | | | | 3,282 | 834 | 116 | 1,252 | 10 | 13,350 |
| 1988 | 4,687 | 5,474 | | | 549 | 2,784 | 729 | 909 | 829 | 9 | 15,970 |
| 1989 | 4,882 | 8,062 | 12 | 215 | 339 | 3,554 | 1,202 | 403 | 656 | 18 | 19,343 |
| 1990 | 5,119 | 6,161 | 55 | 178 | 385 | 3,423 | 740 | 709 | 631 | 24 | 17,425 |
| 1991 | 6,548 | 9,306 | | 301 | 495 | 2,712 | 660 | 848 | 942 | 24 | 21,836 |
| 1992 | 4,124 | 7,256 | 23 | 652 | 655 | 3,668 | 879 | 445 | 867 | 168 | 18,737 |
| 1993 | 5,154 | 5,682 | | 653 | 283 | 6,425 | 1,148 | 875 | 922 | 0 | 21,142 |
| 1994 | 3,070 | 624 | | 402 | 202 | 3,548 | 930 | 927 | 545 | 0 | 10,248 |
| 1995 | 1,217 | 0 | | 425 | 252 | 2,838 | 545 | 509 | 479 | 0 | 6,265 |
| 1996 | 1,005 | 11 | | 320 | 74 | 2,587 | 415 | 697 | 770 | 0 | 5,879 |
| 1997 | 1,470 | 42 | | 315 | 34 | 3,777 | 557 | 778 | 826 | 0 | 7,799 |
| 1998 | 1,275 | 3,384 | | 350 | | 2,511 | 840 | 563 | 793 | 0 | 9,716 |
| 1999 | 2,241 | 3,496 | | 939 | 197 | 3,037 | 1,188 | 977 | 56 | 0 | 12,131 |
| 2000 | 2,721 | 7,076 | | 838 | 236 | 4,611 | 742 | 695 | 422 | 0 | 17,341 |
| 2001 | 2,313 | 5,007 | | 648 | 88 | 4,067 | 965 | 409 | 417 | 0 | 13,914 |
| 2002 | 1,992 | 4,508 | | 559 | 52 | 2,878 | 761 | 508 | 99 | 0 | 11,357 |
| 2003 | 2,293 | 6,605 | | 277 | 122 | 4,467 | 371 | 587 | 313 | 0 | 15,035 |
| 2004 | 1,294 | 9,050 | 12 | 523 | 85 | 3,657 | 390 | 344 | 293 | 0 | 15,648 |
| 2005 | 1,052 | 7,332 | | 963 | 0 | 4,508 | 307 | 800 | 915 | 68 | 15,945 |

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Table 38.–Page 2 of 2.

| Year | Alexander Creek | Deshka River | Rabideux Creek | Yentna River | Peters Creek | Lake Creek | Fish Creek ^a | Talachulitna River | Other streams ^b | Other lakes ^b | Total |
|-----------|-----------------|--------------|----------------|--------------|--------------|------------|-------------------------|--------------------|----------------------------|--------------------------|--------|
| 2006 | 1,396 | 7,753 | 40 | 1,964 | 33 | 4,070 | 103 | 452 | 643 | 0 | 16,454 |
| 2007 | 412 | 5,696 | 0 | 827 | 465 | 2,881 | 68 | 1021 | 0 | 0 | 11,370 |
| 2008 | 0 | 2,036 | 0 | 1,009 | 220 | 2,756 | 89 | 435 | 260 | 0 | 6,805 |
| 2009 | 0 | 723 | 35 | 863 | 148 | 2,273 | 174 | 258 | 239 | 0 | 4,713 |
| 2010 | 0 | 3,381 | 16 | 722 | 36 | 1,644 | 41 | 323 | 143 | 16 | 6,322 |
| 2011 | 0 | 3,139 | 10 | 834 | 61 | 1,392 | 51 | 393 | 34 | 0 | 5,914 |
| 2012 | 0 | 1,650 | 0 | 118 | 0 | 602 | 0 | 17 | 138 | 0 | 2,525 |
| Average | | | | | | | | | | | |
| 2008–2012 | 0 | 2,186 | 12 | 709 | 93 | 1,733 | 71 | 285 | 163 | 3 | 5,256 |
| 2013 | 0 | 1,087 | 0 | 115 | 29 | 1,088 | 0 | 0 | 108 | 0 | 2,427 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

^a Fish Lake drainage (Yentna River drainage).

^b May include harvest from West Cook Inlet waters through 1998.

Table 39.—Westside Susitna River Management Unit Chinook salmon escapement index counts, 1979–2013.

| Year | Alexander Creek | Deshka River | | | | Talachulitna River | Cache Creek | Other streams ^b | Aerial total |
|------|--------------------|--------------------|---------------------|--------------|--------------|--------------------|--------------|----------------------------|--------------|
| | | Aerial index | Weir ^a | Peters Creek | Lake Creek | | | | |
| 1979 | 6,215 | 27,385 | NA | 108 | 4,196 | 1,648 | ^c | ND | 39,552 |
| 1980 | ^c | ^c | NA | ^c | ^c | ^c | ^c | ND | ND |
| 1981 | ^c | ^c | NA | ^c | ^c | 2,025 | ^c | ND | 2,025 |
| 1982 | 2,546 | 16,000 | NA | ^c | 3,577 | 3,101 | ^c | ND | 25,224 |
| 1983 | 3,755 | 19,237 | NA | 2,272 | 7,075 | 10,014 | 497 | ND | 42,850 |
| 1984 | 4,620 | 16,892 | NA | 324 | ^c | 6,138 | ^c | ND | 27,974 |
| 1985 | 6,241 | 18,151 | NA | 2,901 | 5,803 | 5,145 | 206 | 485 | 38,932 |
| 1986 | 5,225 | 21,080 | NA | 1,915 | ^c | 3,686 | 424 | ND | 32,330 |
| 1987 | 2,152 | 15,028 | NA | 1,302 | 4,898 | ^c | 556 | ND | 23,936 |
| 1988 | 6,273 | 19,200 | NA | 3,927 | 6,633 | 4,112 | 818 | ND | 40,963 |
| 1989 | 3,497 | ^c | NA | 959 | ^c | ^c | 362 | ND | 4,818 |
| 1990 | 2,596 | 18,166 | NA | 2,027 | 2,075 | 2,694 | 484 | ND | 28,042 |
| 1991 | 2,727 | 8,112 ^d | NA | 2,458 | 3,011 | 2,457 | 499 | 161 | 19,425 |
| 1992 | 3,710 | 7,736 | NA | 996 | 2,322 | 3,648 | 487 | ND | 18,899 |
| 1993 | 2,763 | 5,769 | NA | 1,668 | 2,869 | 3,269 | 1,690 | ND | 18,028 |
| 1994 | 1,514 | 2,665 | NA | 573 | 1,898 | 1,575 | 628 | 570 | 9,423 |
| 1995 | 2,090 | 5,150 | 10,048 | 1,041 | 3,017 | 2,521 | 1,601 | 408 | 15,828 |
| 1996 | 2,319 | 6,343 | 14,349 | 749 | 3,514 | 2,748 | 581 | 548 | 16,802 |
| 1997 | 5,598 | 19,047 | 35,587 | 2,637 | 3,841 | 4,494 | 1,774 | 1,046 | 38,437 |
| 1998 | 2,807 | 15,556 | 15,409 ^e | 4,367 | 5,056 | 2,759 | 1,771 | 642 | 32,958 |
| 1999 | 3,974 | 12,904 | 29,649 | 3,298 | 2,877 | 4,890 | 1,720 | 597 | 30,260 |
| 2000 | 2,331 ^d | ^c | 35,242 | 1,648 | 4,035 | 2,414 | 709 | ND | 11,137 |
| 2001 | 2,282 | ^c | 29,004 | 4,226 | 4,661 | 3,309 | 624 | ND | 15,102 |
| 2002 | 1,936 | 8,749 | 29,428 | 2,959 | 4,852 | 7,824 | 671 | 1,075 | 28,066 |
| 2003 | 2,012 | ^c | 39,496 | 3,998 | 8,153 | 9,573 | 558 | ND | 24,294 |
| 2004 | 2,215 | 28,778 | 57,934 | 3,757 | 7,598 | 8,352 | 212 | 3,509 | 54,421 |
| 2005 | 2,140 | 11,495 | 37,725 | 1,508 | 6,345 | 4,406 | 1,460 | 420 | 27,774 |

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Table 39.–Page 2 of 2.

| Year | Deshka River | | | | | | | | Aerial total |
|-----------------|--------------------------|--------------------|----------------------------|---------------------------|---------------------------|--------------------------|--------------|----------------------------|--------------|
| | Alexander Creek | Aerial index | Weir ^a | Peters Creek | Lake Creek | Talachulitna River | Cache Creek | Other streams ^b | |
| 2006 | 885 | 6,499 ^d | 31,150 | 1,114 | 5,300 | 6,152 | 1,230 | 1,894 | 23,074 |
| 2007 | 480 | 6,712 | 18,714 | 1,225 | 4,081 | 3,871 | 551 | 1,725 | 18,645 |
| 2008 | 150 ^d | ^c | 7,533 | ^c | 2,004 | 2,964 | ^c | 491 | 5,609 |
| 2009 | 275 | 3,954 | 11,967 | 1,283 | 1,394 | 2,608 | ^c | 457 | 9,971 |
| 2010 | 177 | ^c | 18,594 | ^c | 1,617 | 1,499 | ^c | 209 | 3,502 |
| 2011 | 343 | 7,522 | 18,968 | 1,103 | 2,563 | 1,368 | 27 | 398 | 13,324 |
| 2012 | 181 | 0 | 14,096 | 459 | 2,366 | 847 | 87 | 440 | 4,380 |
| Average | | | | | | | | | |
| 1979–2012 | 2,785 | 13,063 | 25,852 | 1,959 | 4,056 | 3,939 | 778 | 838 | 22,606 |
| 2003–2012 | 968 | 9,744 | 25,618 | 1,806 | 4,142 | 4,164 | 589 | 1,060 | 18,499 |
| 2008–2012 | 244 | 3,825 | 14,232 | 948 | 1,989 | 1,857 | 57 | 399 | 7,357 |
| 2013 | 588 | 8,686 | 18,297 | 1,643 | 3,655 | 2,285 | 582 | 1,163 | 18,602 |
| Escapement goal | 2,100–6,000 ^f | ^g | 13,000–28,000 ^h | 1,000– 2,600 ^f | 2,500– 7,100 ^f | 2,200–5,000 ^f | | | |

Note: NA means not applicable; ND means no attempts were made to collect data.

^a No weir on the Deshka River prior to 1995. Weir count, not an actual escapement count.

^b May include Donkey Creek, Red Creek, Red Salmon Creek, Canyon Creek, and other miscellaneous creeks.

^c No count due to poor water visibility.

^d Low count due to timing, poor visibility, or weather conditions.

^e High water delayed the deployment of the weir until 16 June 1998. Therefore, this weir count is low and may represent only half of the return.

^f Sustainable Escapement Goal (SEG) established in 2001 (Bue and Hasbrouck *Unpublished*).

^g Aerial escapement goals for Deshka River Chinook salmon: 11,200 fish (1994–1998), 8,750 (1999–2001), and discontinued thereafter (2002–2009).

^h Weir based Biological Escapement Goal (BEG) established in 2001 (Bue and Hasbrouck *Unpublished*).

Table 40.—West Cook Inlet drainage Chinook salmon harvest by fishery, 1977–2013.

| Year | Chuitna River | Beluga River | Theodore River | Lewis River | Susitna River–N. Foreland | South of N. Foreland | Other sites | Total |
|-----------|---------------|--------------|----------------|-------------|---------------------------|----------------------|-------------|-------|
| 1977 | 227 | | 237 | 9 | | | | 473 |
| 1978 | 408 | | 58 | 12 | | | | 478 |
| 1979 | 78 | | 20 | 0 | | | | 98 |
| 1980 | 17 | | 17 | 0 | | | | 34 |
| 1981 | 115 | | 77 | | | | | 192 |
| 1982 | 105 | | 42 | | | | | 147 |
| 1983 | 1,185 | | 0 | | | | | 1,185 |
| 1984 | 723 | | 1,110 | | | | | 1,833 |
| 1985 | 734 | | 1,195 | 100 | | | | 2,029 |
| 1986 | 960 | | 1,418 | | | | | 2,378 |
| 1987 | 146 | | 1,146 | 185 | | | | 1,477 |
| 1988 | 312 | | 1,137 | 246 | | | | 1,695 |
| 1989 | 581 | 237 | 1,317 | 190 | | | | 2,325 |
| 1990 | 1,064 | | 748 | 285 | | | | 2,097 |
| 1991 | 377 | | 369 | 16 | | | | 762 |
| 1992 | 516 | 175 | 522 | | | | | 1,213 |
| 1993 | 893 | | 527 | 27 | | 100 | 408 | 1,955 |
| 1994 | 530 | | 581 | | | 6 | 466 | 1,583 |
| 1995 | 201 | | 360 | 0 | | 19 | 113 | 693 |
| 1996 | 844 | | 183 | 0 | 331 | 0 | 0 | 1,358 |
| 1997 | 728 | | 0 | 0 | 121 | 22 | 23 | 894 |
| 1998 | 551 | | 0 | 0 | 73 | 63 | 6 | 693 |
| 1999 | 561 | | 0 | 0 | 301 | 189 | 22 | 1,073 |
| 2000 | 513 | | 0 | | 182 | 468 | 0 | 1,163 |
| 2001 | 457 | | 21 | | 54 | 64 | 126 | 722 |
| 2002 | 629 | | 0 | 0 | 502 | 0 | 96 | 1,227 |
| 2003 | 592 | 51 | 13 | 0 | 194 | 144 | 130 | 1,124 |
| 2004 | 333 | 276 | 0 | 0 | 102 | 0 | 84 | 795 |
| 2005 | 294 | 105 | 0 | 0 | 24 | 92 | 77 | 592 |
| 2006 | 445 | 66 | 0 | 0 | 160 | 32 | 335 | 1,038 |
| 2007 | 984 | 143 | 0 | 0 | 33 | 47 | 173 | 1,380 |
| 2008 | 46 | 15 | 0 | 0 | 217 | 159 | 0 | 437 |
| 2009 | 109 | 51 | 0 | 0 | 112 | 204 | 353 | 829 |
| 2010 | 0 | 58 | 0 | 0 | 121 | 480 | 0 | 659 |
| 2011 | 0 | 0 | 0 | 0 | 0 | 54 | 22 | 76 |
| 2012 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Average | | | | | | | | |
| 2008–2012 | 31 | 25 | 0 | 0 | 90 | 179 | 75 | 400 |
| 2013 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

Table 41.—West Cook Inlet Management Unit Chinook salmon escapement index counts, 1979–2013.

| Year | Theodore River | | | Lewis River | | Coal Creek | Other streams ^a | Total WCI |
|-------------------|----------------|--------------|------|--------------|----------------|------------------|----------------------------|-----------|
| | Chuitna River | Aerial index | Weir | Aerial index | Weir | | | |
| 1979 | 1,246 | 512 | | 546 | | | 236 | 2,540 |
| 1980 ^b | | | | | | | | |
| 1981 | 1,362 | 535 | | 560 | | | 1,144 | 3,601 |
| 1982 | 3,438 | 1,368 | | 606 | | | 1,972 | 7,384 |
| 1983 | 4,043 | 1,519 | | | ^b | | ^b | 5,562 |
| 1984 | 2,845 | 1,251 | | 947 | | | ^b | 5,043 |
| 1985 | 1,600 | 1,458 | | 861 | | | 700 | 4,619 |
| 1986 | 3,946 | 1,281 | | 722 | | | 165 | 6,114 |
| 1987 | ^b | 1,548 | | 875 | | | ^b | 2,423 |
| 1988 | 3,024 | 1,906 | | 616 | | | ^b | 5,546 |
| 1989 | 990 | 1,026 | | 452 | | | ^b | 2,468 |
| 1990 | 480 | 642 | | 207 | | | ^b | 1,329 |
| 1991 | 537 | 508 | | 303 | | | ^b | 1,348 |
| 1992 | 1,337 | 1,053 | | 445 | | | ^b | 2,835 |
| 1993 | 2,085 | 1,110 | | 531 | | | 156 | 3,882 |
| 1994 | 1,012 | 577 | | 164 | | | 368 | 2,121 |
| 1995 | 1,162 | 694 | | 146 | | 221 | | 2,223 |
| 1996 | 1,343 | 368 | | 257 | | 424 | | 2,392 |
| 1997 | 2,232 | 1,607 | | 777 | | 471 | | 5,087 |
| 1998 | 1,869 | 1,807 | | 626 | | 503 | | 4,805 |
| 1999 | 3,721 | 2,221 | | 675 | | 1195 | | 7,812 |
| 2000 | 1,456 | 1,271 | | 480 | | 757 | | 3,964 |
| 2001 | 1,501 | 1,237 | | 502 | | 1,154 | | 4,394 |
| 2002 | 1,394 | 934 | | 439 | | 882 | | 3,649 |
| 2003 | 2,339 | 1,059 | | 878 | | 698 | | 4,974 |
| 2004 | 2,938 | 491 | | 1000 | | 609 | | 5,038 |
| 2005 | 1,307 | 478 | | 441 | | 504 | | 2,730 |
| 2006 | 1,911 | 958 | | 341 | | 996 | | 4,206 |
| 2007 | 1,180 | 486 | | 0 | ^c | 773 | | 2,439 |
| 2008 | 586 | 345 | | 120 | | | | 1,051 |
| 2009 | 1,040 | 352 | | 111 | | 119 ^d | | 1,622 |
| 2010 | 735 | 202 | | 56 | | | | 993 |
| 2011 | 719 | 327 | | 92 | | 373 | | 1,511 |
| 2012 | 502 | 179 | 657 | 107 | 111 | 184 | | 972 |
| Average | | | | | | | | |
| 1979–2012 | 1,746 | 949 | | 465 | | 616 | 677 | 3,536 |
| 2003–2012 | 1,326 | 488 | | 315 | | 532 | | 2,554 |
| 2008–2012 | 716 | 281 | | 97 | | 225 | | 1,230 |
| 2013 | 1690 | 476 | 684 | 61 | 2 ^c | 138 | | 2,365 |
| SEG ^e | 1,200–2,900 | 500–1,700 | | 250–800 | | | | |

Source: ADF&G staff surveys.

^a May include Olsen, Nikoli, Coal, Straight, Bishop, Drill, and Scarp creeks.

^b No count conducted, turbid water.

^c River diverged into open muskeg one-half mile below bridge. No water in mainstem.

^d Mainstem too glacial to count. Only counted above forks.

^e SEG means sustainable escapement goal.

Table 42.—Harvest of coho salmon from the NCIMA by management unit, 1977–2013.

| Year | Northern Cook Inlet Management Area | | | | | South- central Region total | NCIMA % of region | Alaska total | NCIMA % of state |
|---------------|-------------------------------------|---------------------|---------------------|-----------------------|---------|--------------------------------------|-------------------------|-----------------|------------------------|
| | Knik Arm | Eastside Susitna | Westside Susitna | West Cook Inlet | Total | | | | |
| 1977 | 4,366 | 5,709 | 6,599 | 532 | 17,206 | 67,866 | 25 | 105,004 | 16 |
| 1978 | 7,895 | 8,573 | 10,173 | 378 | 27,019 | 81,990 | 33 | 131,945 | 20 |
| 1979 | 7,139 | 7,564 | 9,036 | 337 | 24,076 | 93,234 | 26 | 119,329 | 20 |
| 1980 | 16,030 | 10,368 | 12,141 | 628 | 39,167 | 127,958 | 31 | 164,302 | 24 |
| 1981 | 10,484 | 6,593 | 5,940 | 604 | 23,621 | 95,376 | 25 | 125,666 | 19 |
| 1982 | 13,676 | 10,167 | 10,658 | 745 | 35,246 | 136,153 | 26 | 195,644 | 18 |
| 1983 | 6,139 | 5,176 | 3,610 | 2,552 | 17,477 | 87,935 | 20 | 149,270 | 12 |
| 1984 | 23,429 | 13,916 | 9,511 | 2,681 | 49,537 | 166,688 | 30 | 238,536 | 21 |
| 1985 | 14,339 | 7,042 | 11,270 | 6,320 | 38,971 | 137,671 | 28 | 200,773 | 19 |
| 1986 | 12,361 | 16,190 | 13,117 | 4,222 | 45,890 | 188,872 | 24 | 255,887 | 18 |
| 1987 | 25,787 | 11,028 | 8,746 | 8,548 | 54,109 | 176,710 | 31 | 235,435 | 23 |
| 1988 | 40,037 | 19,518 | 16,283 | 7,403 | 83,241 | 225,812 | 37 | 281,450 | 30 |
| 1989 | 23,846 | 17,078 | 18,226 | 7,683 | 66,833 | 237,155 | 28 | 338,195 | 20 |
| 1990 | 18,762 | 11,743 | 13,883 | 6,016 | 50,404 | 214,114 | 24 | 325,936 | 15 |
| 1991 | 22,186 | 19,479 | 20,507 | 8,253 | 70,425 | 254,961 | 28 | 389,569 | 18 |
| 1992 | 25,814 | 33,790 | 16,218 | 7,037 | 82,859 | 237,204 | 35 | 345,513 | 24 |
| 1993 | 35,763 | 26,063 | 15,454 | 10,326 | 87,606 | 283,868 | 31 | 412,487 | 21 |
| 1994 | 28,539 | 20,870 | 15,361 | 8,247 | 73,017 | 299,849 | 24 | 502,948 | 15 |
| 1995 | 20,650 | 19,165 | 17,148 | 8,182 | 65,145 | 263,749 | 25 | 368,631 | 18 |
| 1996 | 24,874 | 24,174 | 17,375 | 11,430 | 77,853 | 328,178 | 24 | 503,413 | 15 |
| 1997 | 11,773 | 10,297 | 7,123 | 6,492 | 35,685 | 283,311 | 13 | 462,931 | 8 |
| 1998 | 23,750 | 23,086 | 13,235 | 8,160 | 68,231 | 375,742 | 18 | 600,862 | 11 |
| 1999 | 14,429 | 23,292 | 17,995 | 9,339 | 65,055 | 309,564 | 21 | 632,829 | 10 |
| 2000 | 32,530 | 37,748 | 23,262 | 11,712 | 105,252 | 419,835 | 25 | 624,327 | 17 |
| 2001 | 30,106 | 26,617 | 19,221 | 13,949 | 89,893 | 480,048 | 19 | 811,799 | 11 |
| 2002 | 44,448 | 27,183 | 14,144 | 13,380 | 99,155 | 488,911 | 20 | 776,033 | 13 |
| 2003 | 24,583 | 18,585 | 16,072 | 14,239 | 73,479 | 450,231 | 16 | 783,328 | 9 |
| 2004 | 34,298 | 20,484 | 17,785 | 16,179 | 88,746 | 516,183 | 17 | 861,490 | 10 |
| 2005 | 27,000 | 17,471 | 18,266 | 12,572 | 75,309 | 514,473 | 15 | 937,965 | 8 |
| 2006 | 39,953 | 22,719 | 20,474 | 11,940 | 95,086 | 425,981 | 22 | 652,953 | 15 |
| 2007 | 27,733 | 13,464 | 14,065 | 12,580 | 67,842 | 444,032 | 15 | 716,815 | 9 |
| 2008 | 35,996 | 24,211 | 15,126 | 14,673 | 90,006 | 426,916 | 21 | 676,376 | 13 |
| 2009 | 37,271 | 15,335 | 14,464 | 9,801 | 76,871 | 397,945 | 19 | 665,000 | 12 |
| 2010 | 26,369 | 14,291 | 16,245 | 9,030 | 65,935 | 369,235 | 18 | 565,943 | 12 |
| 2011 | 8,484 | 9,040 | 12,483 | 6,292 | 36,299 | 331,506 | 11 | 575,303 | 6 |
| 2012 | 5,014 | 7,629 | 9,434 | 7,813 | 29,890 | 211,501 | 14 | 429,229 | 7 |
| Average | | | | | | | | | |
| 1977–2012 | 22,385 | 16,824 | 13,907 | 7,785 | 60,901 | 281,965 | 23 | 448,975 | 15 |
| 2008–2012 | 22,627 | 14,101 | 13,550 | 9,522 | 59,800 | 347,421 | 17 | 582,370 | 10 |
| % of NCIMA | | | | | | | | | |
| total average | | | | | | | | | |
| 2008–2012 | 38 | 24 | 23 | 16 | | | | | |
| 2013 | 12,335 | 12,989 | 13,042 | 7,698 | 46,064 | 345,105 | 13 | 698,469 | 7 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

Table 43.—Coho salmon harvest and fishing effort from Knik Arm sport fisheries, 1977–2013.

| Year | Little Susitna River | | | Other Knik Arm | | | | | | | | | | Total | | | |
|------|----------------------|-----------------------|--------------------------|------------------------|-------------------------|---------------|-------------------------|------------------|--------------------------|------------|-------------------------|------------------|--------------------------|-------|-------------------------|---------|--------------------------|
| | Harvest | Hatchery ^b | Angler-days ^c | Jim Creek ^a | | Wasilla Creek | | Cottonwood Creek | | Fish Creek | | Eklutna Tailrace | | Other | | Harvest | Angler-days ^c |
| | | | | Harv. | Angl.-days ^c | Harv. | Angl.-days ^c | Harvest | Angler-days ^c | Harv. | Angl.-days ^c | Harvest | Angler-days ^c | Harv. | Angl.-days ^c | | |
| 1977 | 3,415 | | 11,063 | | | 472 | 2,805 | | | | | | | 479 | 68,081 | 4,366 | 81,949 |
| 1978 | 4,865 | | 12,127 | | | 2,112 | 3,446 | | | | | | | 918 | 59,967 | 7,895 | 75,540 |
| 1979 | 3,382 | | 21,301 | | | 1,211 | 4,024 | 1,198 | 5,345 | | | | | 1,348 | 47,741 | 7,139 | 78,411 |
| 1980 | 6,302 | | 22,420 | | | 3,555 | 5,726 | 3,375 | 9,268 | | | | | 2,798 | 65,116 | 16,030 | 102,530 |
| 1981 | 5,940 | | 26,162 | 1,801 | 4,904 | 814 | 4,019 | 1,373 | 8,663 | | | | | 556 | 61,304 | 10,484 | 105,052 |
| 1982 | 7,116 | | 24,020 | 2,306 | 6,653 | 1,624 | 6,261 | 1,886 | 5,186 | | | | | 744 | 49,593 | 13,676 | 91,713 |
| 1983 | 2,835 | | 35,477 | 774 | 9,183 | 345 | 3,239 | 518 | 5,944 | | | | | 1,667 | 84,546 | 6,139 | 138,389 |
| 1984 | 14,253 | | 48,517 | 3,429 | 9,369 | 1,920 | 3,547 | 1,895 | 7,144 | | | 561 | 3,413 | 1,371 | 58,737 | 23,429 | 130,727 |
| 1985 | 7,764 | | 37,498 | 2,523 | 8,970 | 1,900 | 3,115 | 1,005 | 4,560 | 284 | 903 | 557 | 2,995 | 306 | 64,585 | 14,339 | 122,626 |
| 1986 | 6,039 | 109 | 45,776 | 2,948 | 13,015 | 944 | 3,387 | 690 | 5,653 | 364 | 2,641 | 502 | 8,549 | 874 | 52,585 | 12,361 | 131,606 |
| 1987 | 13,003 | 3,407 | 35,659 | 3,676 | 6,990 | 1,195 | 2,173 | 1,159 | 2,934 | 833 | 2,898 | 2,318 | 11,663 | 3,603 | 77,850 | 25,787 | 140,167 |
| 1988 | 19,009 | 9,638 | 49,731 | 11,078 | 23,229 | 1,273 | 2,228 | 746 | 4,056 | 1,637 | 3,110 | 3,329 | 13,188 | 2,965 | 87,487 | 40,037 | 183,029 |
| 1989 | 14,129 | 10,597 | 54,708 | 4,220 | 11,141 | 975 | 2,406 | 876 | 3,069 | 784 | 3,314 | 1,666 | 10,342 | 1,196 | 61,932 | 23,846 | 146,912 |
| 1990 | 7,497 | 2,242 | 40,159 | 6,184 | 17,878 | 1,012 | 2,679 | 286 | 3,056 | 398 | 3,936 | 1,012 | 7,618 | 2,373 | 67,558 | 18,762 | 142,884 |
| 1991 | 16,450 | 7,699 | 50,838 | 2,920 | 13,736 | 844 | 2,893 | 176 | 1,623 | 486 | 3,693 | 631 | 5,892 | 679 | 67,930 | 22,186 | 146,605 |
| 1992 | 20,033 | 3,406 | 49,304 | 3,409 | 8,856 | 413 | 1,110 | 348 | 1,974 | 526 | 3,638 | 664 | 4,279 | 421 | 72,664 | 25,814 | 141,825 |
| 1993 | 27,610 | 7,703 | 42,249 | 2,878 | 6,824 | 1,133 | 1,774 | 736 | 3,077 | 741 | 2,341 | 1,337 | 4,523 | 1,328 | 57,426 | 35,763 | 118,214 |
| 1994 | 17,665 | 6,165 | 45,149 | 3,946 | 9,658 | 1,390 | 2,226 | 1,100 | 3,230 | 492 | 2,358 | 3,553 | 8,974 | 393 | 71,777 | 28,539 | 143,372 |
| 1995 | 14,451 | 2,991 | 41,119 | 3,549 | 10,893 | 445 | 1,373 | 340 | 2,598 | 435 | 2,256 | 990 | 11,453 | 440 | 56,462 | 20,650 | 126,154 |
| 1996 | 16,753 | 3,418 | 24,575 | 3,911 | 7,561 | 872 | 1,386 | 762 | 1,783 | 607 | 934 | 1,217 | 6,448 | 752 | 48,303 | 24,874 | 90,990 |
| 1997 | 7,756 | 0 | 27,883 | 1,786 | 5,349 | 708 | 1,188 | 372 | 2,070 | 148 | 1,104 | 728 | 3,835 | 275 | 54,301 | 11,773 | 95,730 |
| 1998 | 14,469 | 0 | 22,108 | 4,197 | 5,272 | 970 | 1,171 | 1,098 | 3,454 | 1,334 | 2,256 | 1,422 | 5,100 | 260 | 38,857 | 23,750 | 78,218 |
| 1999 | 8,864 | 0 | 30,437 | 2,612 | 6,860 | 313 | 990 | 537 | 3,506 | 233 | 2,182 | 1,453 | 6,150 | 417 | 62,517 | 14,429 | 112,642 |
| 2000 | 20,357 | 0 | 39,556 | 5,653 | 10,975 | 0 | 328 | 282 | 1,265 | 470 | 1,408 | 5,053 | 7,938 | 715 | 60,131 | 32,530 | 121,601 |
| 2001 | 17,071 | 0 | 33,521 | 8,374 | 13,028 | 0 | 419 | 647 | 2,627 | 361 | 1,670 | 3,399 | 10,166 | 254 | 49,596 | 30,106 | 111,027 |
| 2002 | 19,278 | 0 | 40,346 | 14,707 | 17,989 | 664 | 1,037 | 561 | 1,534 | 1,233 | 2,776 | 7,073 | 11,767 | 932 | 50,745 | 44,448 | 126,194 |
| 2003 | 13,672 | | 31,993 | 6,415 | 13,474 | 261 | 757 | 665 | 2,238 | 112 | 758 | 3,128 | 8,423 | 330 | 46,335 | 24,583 | 103,978 |
| 2004 | 15,307 | 0 | 33,819 | 11,766 | 19,342 | 488 | 1,079 | 532 | 3,282 | 774 | 2,029 | 5,084 | 9,588 | 347 | 44,389 | 34,298 | 113,528 |
| 2005 | 10,203 | 0 | 27,490 | 10,114 | 19,605 | 347 | 684 | 668 | 1,484 | 535 | 1,461 | 4,899 | 19,339 | 234 | 45,700 | 27,000 | 115,763 |

-continued-

Table 43.–Page 2 of 2.

| Year | Little Susitna River | | Other Knik Arm | | | | | | | | | | | | | | |
|-----------|----------------------|---------------------|--------------------------|------------------------|-------------------------|---------------|-------------------------|------------------|--------------------------|------------------|-------------------------|------------------|-------------------------|-------|-------------------------|--------|--------------------------|
| | Harvest | Hatch. ^b | Angler-days ^c | Jim Creek ^a | | Wasilla Creek | | Cottonwood Creek | | Fish Creek | | Eklutna Tailrace | | Other | | Total | |
| | | | | Harv. | Angl.-days ^c | Harv. | Angl.-days ^c | Harvest | Angler-days ^c | Harv. | Angl.-days ^c | Harv. | Angl.-days ^c | Harv. | Angl.-days ^c | Harv. | Angler-days ^c |
| 2006 | 12,399 | 0 | 28,547 | 19,259 | 25,271 | 857 | 869 | 789 | 3,867 | 281 | 948 | 6,104 | 20,465 | 264 | 39,828 | 39,953 | 119,795 |
| 2007 | 11,089 | 0 | 23,233 | 11,848 | 21,342 | 324 | 1,194 | 856 | 3,448 | 120 | 907 | 3,298 | 22,619 | 198 | 47,938 | 27,733 | 120,681 |
| 2008 | 13,498 | 0 | 31,989 | 17,545 | 27,874 | 1,086 | 1,394 | 308 | 2,718 | 993 | 1,343 | 2,253 | 20,586 | 313 | 50,668 | 35,996 | 136,572 |
| 2009 | 8,346 | | 28,151 | 11,573 | 16,486 | 1,002 | 1,619 | 1,503 | 2,512 | 1,178 | 2,050 | 6,767 | 22,625 | 6,902 | 49,065 | 37,271 | 122,508 |
| 2010 | 10,662 | | 24,846 | 8,442 | 16,140 | 2,886 | 2,354 | 301 | 2,064 | 966 ^d | 2,161 | 3,233 | 14,708 | 616 | 44,008 | 27,106 | 106,281 |
| 2011 | 2,452 | | 12,779 | 3,132 | 9,810 | 372 | 1,300 | 619 | 1,736 | 414 | 970 | 1,350 | 5,972 | 145 | 34,117 | 8,484 | 66,684 |
| 2012 | 1,618 | | 10,115 | 1,858 | 7,474 | 191 | 506 | 616 | 884 | 274 | 1,220 | 394 | 5,475 | 0 | 32,999 | 4,951 | 58,673 |
| Average | | | | | | | | | | | | | | | | | |
| 1977–2012 | 11,543 | | 32,352 | 6,214 | 12,661 | 970 | 2,131 | 848 | 3,466 | 594 | 2,045 | 2,551 | 10,141 | 1,039 | 56,468 | 22,404 | 115,238 |
| 2008–2012 | 7,315 | | 21,576 | 8,510 | 15,557 | 1,107 | 1,435 | 669 | 1,983 | 715 | 1,549 | 2,799 | 13,873 | 1,595 | 42,171 | 22,762 | 98,144 |
| 2013 | 5,229 | | 12,012 | 3,258 | 8,474 | 1,286 | 1,569 | 297 | 901 | 356 | 1,000 | 1,521 | 8,370 | 345 | 43,786 | 12,292 | 76,112 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

^a Includes other Knik River tributaries

^b Bartlett and Conrad (1988), Bartlett and Vincent-Lang (1989), Bartlett and Sonnichsen (1990), Bartlett and Bingham (1991), Bartlett (1992, 1994, 1996a, 1996b).

^c Participation directed at coho salmon represents only a portion of the annual effort.

^d Includes Fish Creek saltwater areas.

Table 44.—Westside Knik Arm drainage coho salmon escapement counts, 1981–2013.

| Year | Little Susitna River | | | Cottonwood Creek | | Wasilla Creek drainage | | | | | Total |
|------|------------------------------|--------------|---------------------|--------------------|--------------------|------------------------|--------------|------------------------|--------------------|--------------------|--------------|
| | Fish Creek weir ^a | Stocked fish | Weir ^c | Weir | Index ^b | Weir | | Indices ^b | | | |
| | | | | | | Wasilla Creek | Spring Creek | Wasilla Creek mainstem | Upper Spring Creek | Spring Creek flats | |
| 1981 | 2,382 | | | 2,436 ^d | 423 | | | 238 | ^e | 64 | 302 |
| 1982 | 5,201 | | | 2,064 ^d | 737 | | | 171 | ^e | 105 | 276 |
| 1983 | 2,342 | | | | 506 | | | 4 | ^e | 28 | 32 |
| 1984 | 4,510 | | | | 935 | | | 876 | | 90 | 966 |
| 1985 | 5,089 | | | | 334 | | | 16 | 150 | 81 | 247 |
| 1986 | 2,166 | | 6,999 ^f | | 121 | | | ^e | 141 | 147 | 288 |
| 1987 | 3,871 | | | | 360 | | | 251 | 110 | 42 | 403 |
| 1988 | 2,162 | 4,428 | 20,491 | | 293 | | | ^e | 82 | 30 | 112 |
| 1989 | 3,479 | 6,862 | 15,232 | | 147 | | | ^e | 67 | 39 | 106 |
| 1990 | 2,719 | 3,370 | 14,310 | | 167 | | | 34 | 38 | 12 | 84 |
| 1991 | 1,297 | 8,322 | 37,601 | | 158 | | | 118 | 16 | 5 | 139 |
| 1992 | 1,705 | 2,324 | 20,393 | | 6 | | | 3 | 11 | 0 | 14 |
| 1993 | 2,328 | 9,615 | 33,378 | | 265 | | | ^e | 67 | 69 | 136 |
| 1994 | 350 | 5,124 | 27,820 | | 232 | | | 282 | 76 | 60 | 418 |
| 1995 | 390 | 1,069 | 11,817 | | 242 | | | 46 | 20 | 38 | 104 |
| 1996 | 682 | | 15,803 | | 168 | | | 84 | 30 | 29 | 143 |
| 1997 | 2,578 | | 9,894 ^f | 936 | 386 | | | 156 | 38 | 35 | 229 |
| 1998 | 5,463 | | 15,159 | 2,114 | 537 | 3,614 | 163 | 120 ^g | 31 ^g | 25 | 176 |
| 1999 | 1,766 | | 3,017 | 458 ^h | 131 ⁱ | 1,579 ⁱ | 8 | 211 | 40 | 16 | 267 |
| 2000 | 5,218 ^h | | 15,436 | 1,482 ^h | 876 ⁱ | 6,154 | 0 | 380 ^g | 224 | 50 | 654 |
| 2001 | 9,247 ^h | | 30,587 | 2,921 ^h | 983 ⁱ | 6,508 | 276 | 453 | 37 | 15 | 505 |
| 2002 | 14,651 ^h | | 47,938 | 4,081 ^h | 1,191 ⁱ | 12,495 | 162 | 933 | 188 | 75 | 1,196 |
| 2003 | 1,231 ^h | | 10,877 | 706 ^h | 229 ⁱ | 2,962 | ^j | 227 | 17 | 50 | 294 |
| 2004 | 1,415 | | 40,199 | 1,772 ^h | 430 ⁱ | ^j | | 934 | 114 | 100 | 1,148 |
| 2005 | 3,011 | | 16,839 ^f | ^j | 619 ⁱ | | | ^e | ^e | 130 | ^k |

-continued-

Table 44.–Page 2 of 2.

| Year | Little Susitna River | | Cottonwood Creek | | Wasilla Creek drainage | | | | | | |
|-----------|------------------------------|---------------|---------------------|-------|------------------------|---------------|--------------|------------------------|--------------------|--------------------|------------------|
| | Fish Creek weir ^a | Stocked fish | Weir ^c | Weir | Index ^b | Weir | | Indices ^b | | | Total |
| | | | | | | Wasilla Creek | Spring Creek | Wasilla Creek mainstem | Upper Spring Creek | Spring Creek flats | |
| 2006 | 4,967 | | 8,786 ^f | | 912 ⁱ | | | 294 ^k | 171 | 272 | 737 |
| 2007 | 6,868 | | 17,573 | | 1,024 ⁱ | | | 380 ^k | 50 | 0 | 430 |
| 2008 | 4,868 | | 18,485 | | 1,821 ⁱ | | | 1,461 | 63 | 12 | 1,536 |
| 2009 | 8,214 ^h | | 9,523 | | 942 ⁱ | | | 936 | 28 | 14 | 978 |
| 2010 | 6,977 ^h | | 9,214 | | 756 ⁱ | | | 927 | 290 | 6 | 1,223 |
| 2011 | 1,428 ^h | | 4,826 | | 698 | | | 518 | 55 | 3 | 576 |
| 2012 | 1,237 | | 6,779 ^f | | 467 | | ^e | ^e | ^e | ^e | ^e |
| Average | | | | | | | | | | | |
| 1981–2012 | 3,744 | 5,139 | 19,985 | 1,897 | 534 | 5,552 | 122 | 387 | 83 | 53 | 447 |
| 2003–2012 | 4,022 | – | 15,814 | – | 790 | – | – | 710 | 99 | 65 | 784 |
| 2008–2012 | 4,545 | – | 11,924 | – | 937 | – | – | 961 | 109 | 9 | 1,078 |
| 2013 | 7,593 | | 13,583 ^f | | 1,618 | | | 422 | 12 | 26 | 460 ^e |
| SEG | 1,200–4,400 | 10,100–17,700 | | | | | | | | | |

Source: ADF&G staff surveys and weir data.

Note: The symbol “–” indicates value can’t be calculated due to limitations of the data.

^a Weir count plus stream survey during 1982–1991; weir count only during 1992–1993; weir was removed on 15 August before the majority of the coho run during 1994–1996, 2004–2008, and 2011; weir was out on 1 September in 1997.

^b Foot surveys unless otherwise noted.

^c Weir located at RM 34 in 1986 and 1988–1995; weir located at RM 71 in 1996–2010.

^d Combination weir and foot survey. Weir was removed prior to completion of coho run.

^e No survey conducted.

^f Incomplete or partial count due to weir submersion.

^g Count conducted late due to high water.

^h Coho salmon counted below weir after it was pulled: Fish Creek 2000–2010: 761 (2000), 800 (2001), 536 (2002), 911 (2003), 1,840 (2004), 825 (2005), 756 (2006), 2,750 (2007), 4,735 (2008), 452 (2009), 57 (2010), 872 (2011); Cottonwood Creek 1999–2004: 20 (1999), 406 (2000), 604 (2001), 189 (2002), 85 (2003), 266 (2004).

ⁱ Beginning in 1999, the highest count of 3 counts occurred within a 2-week period.

^j Weir discontinued.

^k Poor counting conditions.

Table 45.—Eastside Knik Arm drainage coho salmon escapement counts, 1981–2013.

| Year | Matanuska River indices ^a | | | Jim Creek drainage | | | |
|-----------|--------------------------------------|--------------------|------------------------|----------------------|--------------------|-----------------------|-------|
| | Yellow Creek | Wolverine Creek | Bartko side channel | Indices ^a | | | Total |
| | | | | Weir | McRoberts Creek | Upper Jim Creek | |
| 1981 | b | | | | | | b |
| 1982 | b | | | | | | b |
| 1983 | b | | | | | | b |
| 1984 | b | | | | | | b |
| 1985 | 65 | | | | 662 | | 662 |
| 1986 | 20 | | | | 439 | | 439 |
| 1987 | 58 | | | | 667 | | 667 |
| 1988 | 110 | | | | 1,911 | | 1,911 |
| 1989 | 226 | | | | 597 | | 597 |
| 1990 | 146 | | | | 599 | 589 | 1,188 |
| 1991 | 136 | | | | 484 | 418 | 902 |
| 1992 | 57 | | | | 11 | 59 | 70 |
| 1993 | 490 | | | 5,532 | 503 | 535 | 1,038 |
| 1994 | 172 | | | 6,451 | 506 | 2,119 | 2,625 |
| 1995 | 220 | | | | 702 | 1,288 | 1,990 |
| 1996 | 101 | | | | 72 | 439 | 511 |
| 1997 | 367 | | | | 701 | 563 | 1,264 |
| 1998 | 302 | | | | 922 | 560 | 1,482 |
| 1999 | 88 | | | | 12 | 320 | 332 |
| 2000 | 169 | | | | 657 | 2,561 | 3,218 |
| 2001 | 419 | | | | 1,019 | 575 | 1,594 |
| 2002 | 65 | | | | 2,473 | 1,630 | 4,103 |
| 2003 | 53 | | | | 1,421 | 393 | 1,814 |
| 2004 | 0 | | | | 4,652 | 1,045 | 5,697 |
| 2005 | 305 | | | | 1,464 | 1,883 | 3,347 |
| 2006 | 47 | | | | 2,389 | 1,750 | 4,139 |
| 2007 | 50 | | | | 725 | 1,150 | 1,875 |
| 2008 | 0 | | | | 1,890 | 1,029 | 2,919 |
| 2009 | ^c | 150 | 440 | | 1,331 | 1,193 | 2,524 |
| 2010 | ^c | | 189 | | 242 | 420 | 662 |
| 2011 | ^c | | 23 | | 261 | 229 | 490 |
| 2012 | ^c | | ^b | | 213 ^d | 495 | 708 |
| Average | | | | | | | |
| 1981–2012 | 153 | – | – | – | 983 | 924 | 1,742 |
| 2003–2012 | 76 | – | – | – | 1,459 | 959 | 2,418 |
| 2008–2012 | 0 | – | – | – | 787 | 673 | 1,461 |
| 2013 | ^c | | 62 | | 663 | 1,029 | 1,692 |
| SEG | | | | | 450–1,400 | | |

Source: ADF&G staff surveys and weir data.

Note: The symbol “–” indicates value can’t be calculated due to limitations of the data.

^a Foot surveys unless otherwise noted.

^b No survey conducted.

^c Index discontinued after more than half the index area was destroyed by the Matanuska River.

^d Count conducted late due to high water.

Table 46.—Eastside Susitna River drainage coho salmon harvest by fishery, 1977–2013.

| Year | Willow Creek | Little Willow Creek | Kashwitna River | Caswell Creek | Sheep Creek | Goose Creek | Montana Creek | Birch Creek | Sunshine Creek | Talkeetna River ^a | Other ^b | Total |
|------|--------------|---------------------|-----------------|---------------|-------------|-------------|---------------|-------------|----------------|------------------------------|--------------------|--------|
| 1977 | 679 | 225 | | | 438 | | 1,415 | | | 1,070 | 1,882 | 5,709 |
| 1978 | 905 | 151 | | | 478 | | 2,451 | | | 2,200 | 2,388 | 8,573 |
| 1979 | 462 | 262 | | 624 | 462 | | 1,735 | | 774 | 1,248 | 1,997 | 7,564 |
| 1980 | 1,207 | 494 | | 1,124 | 430 | | 2,684 | | 1,534 | 661 | 2,234 | 10,368 |
| 1981 | 747 | 29 | | 901 | 326 | | 2,261 | | 968 | 422 | 939 | 6,593 |
| 1982 | 1,069 | 398 | | 776 | 367 | | 3,060 | | 1,719 | 996 | 1,782 | 10,167 |
| 1983 | 576 | 52 | 52 | 408 | 596 | | 1,402 | | 722 | 836 | 532 | 5,176 |
| 1984 | 1,846 | 1,147 | 162 | 1,247 | 661 | 449 | 4,502 | | 1,733 | 1,509 | 660 | 13,916 |
| 1985 | 1,026 | 528 | | 608 | 478 | | 1,972 | | 1,205 | 747 | 478 | 7,042 |
| 1986 | 944 | 363 | 871 | 472 | 1,343 | 363 | 1,488 | 980 | 4,029 | 3,376 | 1,961 | 16,190 |
| 1987 | 2,898 | 561 | 36 | 453 | 1,068 | 145 | 1,394 | 163 | 1,612 | 2,608 | 90 | 11,028 |
| 1988 | 4,875 | 1,237 | 327 | 1,455 | 3,165 | 291 | 2,219 | 691 | 2,146 | 2,929 | 183 | 19,518 |
| 1989 | 4,218 | 1,388 | 336 | 834 | 2,231 | 190 | 2,295 | 281 | 2,159 | 2,775 | 371 | 17,078 |
| 1990 | 2,711 | 639 | 197 | 2,596 | 991 | 180 | 778 | | 704 | 2,539 | 408 | 11,743 |
| 1991 | 4,154 | 1,308 | 167 | 3,819 | 1,544 | 657 | 1,612 | 322 | 1,761 | 3,435 | 700 | 19,479 |
| 1992 | 8,591 | 1,830 | 713 | 5,393 | 4,049 | 502 | 3,595 | 858 | 2,259 | 5,531 | 469 | 33,790 |
| 1993 | 5,743 | 1,213 | 554 | 2,385 | 2,413 | 428 | 3,496 | 535 | 2,922 | 5,830 | 544 | 26,063 |
| 1994 | 4,504 | 1,452 | 328 | 1,569 | 1,586 | 478 | 2,619 | 281 | 1,906 | 5,476 | 671 | 20,870 |
| 1995 | 3,498 | 992 | 472 | 1,687 | 1,092 | 152 | 2,385 | 198 | 1,385 | 6,672 | 632 | 19,165 |
| 1996 | 5,176 | 1,892 | 360 | 668 | 1,896 | 430 | 3,118 | 258 | 2,612 | 7,325 | 439 | 24,174 |
| 1997 | 2,401 | 661 | 202 | 294 | 1,198 | 166 | 1,692 | 177 | 443 | 2,815 | 248 | 10,297 |
| 1998 | 5,908 | 1,185 | 670 | 564 | 3,417 | 382 | 2,720 | 920 | 1,589 | 5,340 | 382 | 23,086 |
| 1999 | 5,019 | 871 | 260 | 1,198 | 3,045 | 440 | 3,382 | 622 | 1,709 | 5,814 | 932 | 23,292 |

-continued-

Table 46.–Page 2 of 2.

| Year | Willow Creek | Little Willow Creek | Kashwitna River | Caswell Creek | Sheep Creek | Goose Creek | Montana Creek | Birch Creek | Sunshine Creek | Talkeetna River ^a | Other ^b | Total |
|-----------|--------------|---------------------|-----------------|---------------|-------------|-------------|---------------|-------------|----------------|------------------------------|--------------------|--------|
| 2000 | 8,679 | 2,885 | 994 | 1,702 | 3,348 | 1,181 | 5,454 | 1,160 | 3,274 | 7,703 | 1,368 | 37,748 |
| 2001 | 6,835 | 1,936 | 728 | 1,408 | 2,588 | 683 | 5,023 | 146 | 1,072 | 5,195 | 1,003 | 26,617 |
| 2002 | 6,040 | 1,513 | 494 | 797 | 2,995 | 204 | 4,644 | 288 | 3,238 | 5,640 | 1,330 | 27,183 |
| 2003 | 2,918 | 635 | 1,090 | 938 | 1,908 | 220 | 3,361 | 421 | 2,508 | 3,984 | 602 | 18,585 |
| 2004 | 2,981 | 1,290 | 251 | 189 | 2,636 | 248 | 4,866 | 223 | 2,070 | 4,454 | 1,276 | 20,484 |
| 2005 | 4,255 | 1,103 | 369 | 340 | 2,337 | 267 | 2,592 | 288 | 2,493 | 3,359 | 68 | 17,471 |
| 2006 | 5,031 | 1,511 | 1,202 | 780 | 3,602 | 906 | 2,622 | 281 | 3,460 | 3,224 | 100 | 22,719 |
| 2007 | 3,625 | 853 | 253 | 185 | 2,707 | 75 | 2,017 | 149 | 1,318 | 2,166 | 116 | 13,464 |
| 2008 | 3,760 | 1,340 | 2,880 | 649 | 2,125 | 594 | 5,628 | 58 | 2,928 | 4,128 | 121 | 24,211 |
| 2009 | 3,232 | 1,027 | 525 | 607 | 1,594 | 635 | 3,087 | 320 | 816 | 3,114 | 1,713 | 16,670 |
| 2010 | 1,986 | 1,506 | 660 | 670 | 1,641 | 132 | 2,498 | 345 | 1,123 | 2,729 | 1,001 | 14,291 |
| 2011 | 2,055 | 189 | 755 | 129 | 762 | 64 | 780 | 196 | 1,046 | 1,895 | 1,169 | 9,040 |
| 2012 | 918 | 295 | 285 | 160 | 395 | 608 | 1,085 | 129 | 957 | 2,282 | 515 | 7,629 |
| Average | | | | | | | | | | | | |
| 2008–2012 | 2,390 | 871 | 1,021 | 443 | 1,303 | 407 | 2,616 | 210 | 1,374 | 2,830 | 904 | 14,368 |
| 2013 | 1,760 | 210 | 541 | 284 | 1,699 | 52 | 2,428 | 652 | 685 | 2,940 | 1,738 | 12,989 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

^a Talkeetna River and tributaries including Clear Creek.

^b Includes lakes and streams.

Table 47.—Westside Susitna River drainage coho salmon harvest by fishery, 1977–2013.

| Year | Alexander Creek | Deshka River | Rabideux Creek | Peters Creek | Yentna River | Lake Creek | Fish Creek ^a | Talachulitna River | Other ^b | Total |
|------|--------------------|-----------------|-------------------|-----------------|-----------------|---------------|-------------------------|-----------------------|--------------------|--------|
| 1977 | 1,562 | 559 | | | | 1,203 | | 346 | 2,929 | 6,599 |
| 1978 | 2,401 | 1,789 | | | | 2,212 | | 88 | 3,683 | 10,173 |
| 1979 | 1,560 | 973 | | | | 2,671 | | 125 | 3,707 | 9,036 |
| 1980 | 999 | 2,290 | | | | 2,351 | | 491 | 6,010 | 12,141 |
| 1981 | 891 | 632 | | | | 1,035 | | 240 | 3,142 | 5,940 |
| 1982 | 1,907 | 2,463 | | | | 1,603 | | 524 | 4,161 | 10,658 |
| 1983 | 408 | 1,036 | | | | 1,392 | | 84 | 690 | 3,610 |
| 1984 | 1,509 | 1,646 | | 12 | | 2,432 | | 486 | 3,426 | 9,511 |
| 1985 | 1,455 | 2,637 | | | | 4,105 | | 224 | 2,849 | 11,270 |
| 1986 | 1,352 | 4,256 | | | | 1,575 | 324 | 402 | 5,208 | 13,177 |
| 1987 | 1,539 | 2,789 | | | | 1,358 | 362 | 235 | 2,463 | 8,746 |
| 1988 | 1,965 | 7,458 | | 18 | | 2,110 | 400 | 418 | 3,914 | 16,283 |
| 1989 | 2,207 | 8,947 | 409 | 47 | 103 | 1,907 | 549 | 688 | 3,369 | 18,226 |
| 1990 | 1,973 | 4,959 | 540 | 33 | 353 | 2,986 | 793 | 276 | 1,970 | 13,883 |
| 1991 | 2,296 | 8,111 | 32 | 221 | 718 | 4,221 | 1,081 | 828 | 2,999 | 20,507 |
| 1992 | 834 | 7,110 | 543 | 300 | 275 | 2,632 | 575 | 405 | 3,544 | 16,218 |
| 1993 | 1,719 | 6,530 | | 67 | 227 | 3,101 | 920 | 152 | 2,738 | 15,454 |
| 1994 | 2,188 | 5,511 | | 72 | 556 | 2,723 | 714 | 427 | 3,170 | 15,361 |
| 1995 | 2,692 | 2,275 | | 183 | 569 | 4,736 | 1,058 | 1,031 | 4,604 | 17,148 |
| 1996 | 803 | 4,615 | | 57 | 1,198 | 4,445 | 618 | 805 | 4,834 | 17,375 |
| 1997 | 1,307 | 1,169 | | 89 | 591 | 1,445 | 332 | 793 | 1,397 | 7,123 |
| 1998 | 1,158 | 3,630 | | | 299 | 4,353 | 785 | 905 | 2,105 | 13,235 |
| 1999 | 1,418 | 4,034 | | 65 | 1,093 | 6,931 | 2,261 | 1,453 | 740 | 17,995 |

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Table 47.–Page 2 of 2.

| Year | Alexander Creek | Deshka River | Rabideux Creek | Peters Creek | Yentna River | Lake Creek | Fish Creek ^a | Talachulitna River | Other ^b | Total |
|-----------|--------------------|-----------------|-------------------|-----------------|-----------------|---------------|-------------------------|-----------------------|--------------------|--------|
| 2000 | 2,695 | 8,687 | | 157 | 1,050 | 6,297 | 1,320 | 1,347 | 1,709 | 23,262 |
| 2001 | 1,972 | 6,556 | | 0 | 620 | 5,610 | 1,958 | 1,142 | 1,363 | 19,221 |
| 2002 | 1,191 | 3,616 | | 177 | 705 | 4,613 | 1,034 | 1,447 | 1,361 | 14,144 |
| 2003 | 1,071 | 4,946 | | 155 | 1,162 | 5,263 | 959 | 1,543 | 973 | 16,072 |
| 2004 | 1,827 | 4,440 | 586 | 149 | 1,283 | 6,106 | 1,880 | 959 | 555 | 17,785 |
| 2005 | 757 | 3,616 | 168 | 96 | 678 | 8,684 | 2,292 | 583 | 1,392 | 18,266 |
| 2006 | 119 | 6,042 | 837 | 105 | 3,040 | 6,330 | 1,433 | 1,127 | 1,441 | 20,474 |
| 2007 | 328 | 2,550 | 134 | 454 | 3,512 | 3,685 | 842 | 1,804 | 756 | 14,065 |
| 2008 | 10 | 3,426 | 714 | 227 | 3,563 | 4,147 | 567 | 1,511 | 961 | 15,126 |
| 2009 | 501 | 4,060 | 23 | 472 | 2,607 | 4,417 | 417 | 675 | 1,292 | 14,464 |
| 2010 | 214 | 5,690 | 112 | 200 | 3,679 | 4,572 | 322 | 681 | 566 | 16,036 |
| 2011 | 245 | 2,282 | 118 | 894 | 3,685 | 3,340 | 139 | 533 | 1,247 | 12,483 |
| 2012 | 237 | 1,358 | 149 | 158 | 2,406 | 2,775 | 696 | 444 | 1,211 | 9,434 |
| Average | | | | | | | | | | |
| 2008–2012 | 241 | 3,363 | 223 | 390 | 3,188 | 3,850 | 428 | 769 | 1,055 | 13,509 |
| 2013 | 448 | 2,658 | 0 | 0 | 2,111 | 4,961 | 81 | 1,040 | 1,743 | 13,042 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

^a Fish Lake drainage (Yentna River drainage).

^b May include harvest from West Cook Inlet Management Unit lakes and streams.

Table 48.—Eastside and westside Susitna River drainage coho salmon escapement counts, 1984–2013.

| Year | Westside Susitna Management Unit | | | Eastside Susitna Management Unit ^a | | | | Overall total |
|-----------|----------------------------------|----------------------|------------|---|----------------------|--------------------|------------|---------------|
| | Deshka River weir | Rabideux Creek index | WSMU total | Birch Creek index | Question Creek index | Answer Creek index | ESMU total | |
| 1984 | | 480 | 480 | 236 | 60 | 57 | 353 | 833 |
| 1985 | | 82 | 82 | 30 | 89 | 9 | 128 | 210 |
| 1986 | | ^b | 0 | 25 | ^b | ^b | 25 | 25 |
| 1987 | | 50 ^c | 50 | 46 | 149 | 10 | 205 | 255 |
| 1988 | | 230 | 230 | 63 | 337 | 160 | 560 | 790 |
| 1989 | | 20 | 20 | 180 | 31 | 66 | 277 | 297 |
| 1990 | | 20 | 20 | 36 | 41 | 6 | 83 | 103 |
| 1991 | | 185 | 185 | 300 | 492 | 51 | 843 | 1,028 |
| 1992 | | ^b | 0 | 167 | 227 | 181 | 575 | 575 |
| 1993 | | ^b | 0 | 178 | 370 | 34 | 582 | 582 |
| 1994 | | 105 | 105 | 224 | 339 | 0 ^d | 563 | 668 |
| 1995 | 12,824 | 39 | 12,863 | 127 | 155 | 35 | 317 | 13,180 |
| 1996 | | ^b | 0 | 458 | 238 | 43 | 739 | 739 |
| 1997 | 8,063 | 114 | 8,177 | 217 | 186 | 57 | 460 | 8,637 |
| 1998 | 6,773 ^e | 56 | 6,829 | 356 | 519 | 45 | 920 | 7,749 |
| 1999 | 4,563 ^e | 169 | 4,732 | 153 | 128 | 470 | 751 | 5,483 |
| 2000 | 26,387 | 354 | 26,741 | 809 | 1,040 | 899 | 2,748 | 29,489 |
| 2001 | 29,927 | 656 | 30,583 | 1,470 | 450 | 371 | 2,291 | 32,874 |
| 2002 | 24,612 ^e | ^b | 24,612 | 1,158 | 1,010 | 249 | 2,417 | 27,029 |
| 2003 | 17,305 | 344 | 17,649 | ^b | 407 | 131 | 538 | 18,187 |
| 2004 | 62,940 | ^b | 62,940 | ^b | 822 | 111 | 933 | 63,873 |
| 2005 | 47,887 | ^b | 47,887 | 1,014 | 537 | 35 | 1,586 | 49,473 |
| 2006 | 59,419 ^e | 3,063 | 62,482 | 883 | 299 | 270 | 1,452 | 63,934 |
| 2007 | 10,575 | ^b | 10,575 | 167 | 241 | 26 | 434 | 11,009 |
| 2008 | 12,724 | 10,043 | 22,767 | 798 | 273 | 382 | 1,453 | 24,220 |
| 2009 | 27,348 | 345 ^f | 27,693 | 219 ^f | 9 ^f | 166 ^f | 394 | 28,087 |
| 2010 | 10,393 | 161 | 10,554 | 117 | 41 | 2 | 160 | 10,714 |
| 2011 | 7,508 ^e | 58 | 7,566 | 76 | 94 | 116 | 286 | 7,852 |
| 2012 | 6,825 ^e | ^b | 6,825 | 276 | 75 ^c | ^b | 351 | 7,176 |
| Average | | | | | | | | |
| 1984–2012 | 24,216 ^g | 829 | 13,540 | 362 | 309 | 147 | 773 | 14,313 |
| 2003–2012 | 28,645 ^g | 2,336 | 27,694 | 444 | 280 | 138 | 759 | 28,453 |
| 2008–2012 | 16,822 ^g | 2,652 | 15,081 | 297 | 98 | 167 | 529 | 15,610 |
| 2013 | 22,341 ^e | 127 | 22,468 | 159 | 265 | 19 | 443 | 22,911 |

Source: ADF&G weir and foot surveys.

^a Survey conducted by walking portions of the creek.

^b No survey conducted.

^c Poor survey conditions.

^d Beaver dam downstream of index area blocked passage of fish.

^e Deshka River weir locations: RM17 (1995) and RM 7 (1997–2000). In 1998, 1999, 2002, 2006, and 2011–2013, counts were incomplete due to flooding and are considered minimum counts.

^f Extreme low water conditions.

^g Average includes only complete count years at Deshka River weir (RM 7): 1997, 2000–2001, and 2003–2005.

Table 49.—West Cook Inlet drainage coho salmon harvest by fishery, 1993–2013.

| Year | Chuitna River | Beluga River | Theodore River | Lewis River | Kustatan River | Polly Creek | Big River Lakes ^a | Silver Salmon Creek | Other Susitna R.-N. Foreland | Other south of N. Foreland | Other ^b | Total |
|-----------|---------------|--------------|----------------|-------------|----------------|-------------|------------------------------|---------------------|------------------------------|----------------------------|--------------------|--------|
| 1993 | 1,313 | | 236 | 194 | 6,457 | | 158 | | | 751 | 1,217 | 10,326 |
| 1994 | 559 | | 521 | | 5,259 | | 25 | | | 268 | 1,615 | 8,247 |
| 1995 | 1,407 | | 372 | | 4,237 | 641 | 75 | | | 559 | 891 | 8,182 |
| 1996 | 1,263 | | 361 | | 6,266 | 170 | 600 | | 741 | 1,858 | 171 | 11,430 |
| 1997 | 1,156 | | 187 | | 3,605 | | 305 | | 574 | 632 | 33 | 6,492 |
| 1998 | 2,348 | | 380 | | 3,999 | | 264 | | 650 | 382 | 137 | 8,160 |
| 1999 | 1,614 | | 290 | | 3,178 | | 463 | | 1,282 | 2,047 | 465 | 9,339 |
| 2000 | 1,872 | | 1,161 | | 5,699 | | 325 | | 1,134 | 1,521 | | 11,712 |
| 2001 | 3,284 | | 1,029 | | 4,920 | | 508 | | 1,210 | 2,998 | | 13,949 |
| 2002 | 2,586 | | 1,208 | 200 | 5,795 | | 490 | | 1,725 | 761 | 615 | 13,380 |
| 2003 | 1,467 | 426 | 225 | 197 | 3,967 | 190 | 2,830 | 2,269 | 429 | 1,611 | 628 | 14,239 |
| 2004 | 1,655 | 520 | 645 | 90 | 3,984 | 39 | 2,648 | 1,389 | 225 | 3,471 | 1103 | 15,769 |
| 2005 | 972 | 120 | 229 | 524 | 3,551 | | 3,916 | 1,568 | 491 | 913 | 288 | 12,572 |
| 2006 | 531 | 313 | 282 | 177 | 3,556 | 73 | 3,953 | 997 | 360 | 1,538 | 160 | 11,940 |
| 2007 | 1,577 | 537 | 811 | 82 | 4,057 | 45 | 1,644 | 1,041 | 792 | 820 | 1,174 | 12,580 |
| 2008 | 1,401 | 490 | 31 | 29 | 3,868 | 285 | 3,560 | 356 | 122 | 967 | 3,564 | 14,673 |
| 2009 | 707 | 154 | 313 | 73 | 2,639 | 106 | 3,032 | 1,133 | 1,009 | 548 | 87 | 9,801 |
| 2010 | 257 | 244 | 178 | 77 | 2,832 | 79 | 3,627 | 714 | 130 | 892 | 0 | 9,030 |
| 2011 | 425 | 512 | 45 | 9 | 1,876 | 28 | 1,270 | 640 | 852 | 419 | 216 | 6,292 |
| 2012 | 770 | 338 | 116 | 27 | 2,136 | 0 | 1,634 | 419 | 734 | 974 | 665 | 7,813 |
| Average | | | | | | | | | | | | |
| 2008–2012 | 712 | 348 | 137 | 43 | 2,670 | 100 | 2,625 | 652 | 569 | 760 | 906 | 9,522 |
| 2013 | 375 | 48 | 328 | 92 | 2,550 | 0 | 2,293 | 224 | 427 | 1,269 | 92 | 7,698 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

^a Wolverine Creek and other tributaries of Big River Lakes.

^b Includes lakes and streams. Beginning in 1999, includes saltwater shoreline.

Table 50.–Northern Cook Inlet Management Area sport harvest of sockeye salmon by management unit, 1977–2013.

| Year | Knik Arm | Eastside Susitna | Westside Susitna | West Cook Inlet | Total |
|-----------|----------|------------------|------------------|-----------------|--------|
| 1977 | 1,576 | 3,594 | 2,786 | 6 | 7,962 |
| 1978 | 1,239 | 267 | 1,634 | 0 | 3,140 |
| 1979 | 3,616 | 1,020 | 1,557 | 0 | 6,193 |
| 1980 | 5,674 | 873 | 1,111 | 0 | 7,658 |
| 1981 | 6,080 | 833 | 1,408 | 48 | 8,369 |
| 1982 | 4,621 | 1,555 | 2,881 | 10 | 9,067 |
| 1983 | 14,297 | 3,221 | 3,549 | 466 | 21,533 |
| 1984 | 9,240 | 2,705 | 3,415 | 249 | 15,609 |
| 1985 | 5,612 | 1,465 | 2,302 | 461 | 9,840 |
| 1986 | 6,009 | 4,029 | 4,076 | 89 | 14,203 |
| 1987 | 8,785 | 2,046 | 2,427 | 272 | 13,530 |
| 1988 | 8,076 | 2,857 | 3,167 | 473 | 14,573 |
| 1989 | 9,040 | 2,527 | 2,307 | 529 | 14,403 |
| 1990 | 6,588 | 2,677 | 1,938 | 636 | 11,839 |
| 1991 | 4,968 | 2,897 | 3,083 | 765 | 11,713 |
| 1992 | 5,349 | 3,468 | 2,916 | 188 | 11,921 |
| 1993 | 5,926 | 4,137 | 2,161 | 2,355 | 14,579 |
| 1994 | 5,082 | 3,443 | 1,919 | 2,035 | 12,479 |
| 1995 | 4,349 | 3,682 | 2,106 | 1,304 | 11,441 |
| 1996 | 4,307 | 2,675 | 1,115 | 2,951 | 11,048 |
| 1997 | 4,095 | 5,851 | 3,109 | 2,174 | 15,229 |
| 1998 | 5,499 | 5,859 | 2,463 | 2,522 | 16,343 |
| 1999 | 3,658 | 4,608 | 5,279 | 2,990 | 16,535 |
| 2000 | 7,536 | 6,509 | 4,946 | 4,244 | 23,235 |
| 2001 | 4,328 | 6,776 | 6,311 | 3,150 | 20,565 |
| 2002 | 4,619 | 3,427 | 1,881 | 2,019 | 11,946 |
| 2003 | 6,606 | 2,734 | 8,660 | 4,708 | 22,708 |
| 2004 | 7,148 | 3,107 | 3,358 | 3,323 | 16,936 |
| 2005 | 3,460 | 1,677 | 2,219 | 4,025 | 11,381 |
| 2006 | 4,622 | 1,412 | 626 | 4,993 | 11,653 |
| 2007 | 7,030 | 1,470 | 3,177 | 8,187 | 19,864 |
| 2008 | 6,695 | 2,975 | 1,428 | 5,652 | 16,750 |
| 2009 | 5,997 | 7,324 | 2,358 | 4,261 | 19,940 |
| 2010 | 5,630 | 3,944 | 1,505 | 5,232 | 16,311 |
| 2011 | 3,719 | 2,459 | 3,413 | 4,412 | 14,003 |
| 2012 | 2,685 | 4,277 | 1,118 | 4,966 | 13,046 |
| Average | | | | | |
| 1977–2012 | 5,660 | 3,177 | 2,770 | 2,214 | 13,821 |
| 2008–2012 | 4,945 | 4,196 | 1,964 | 4,905 | 16,010 |
| 2013 | 2,749 | 4,170 | 5,190 | 5,003 | 17,112 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

Table 51.—Knik Arm drainage sockeye salmon harvest by fishery, 1977–2013.

| Year | Little Susitna ^a | Knik River ^b | Eklutna Tailrace | Wasilla Creek | Cottonwood Creek | Big Lake ^c | Other ^d | Total |
|-----------|-----------------------------|-------------------------|------------------|---------------|------------------|-----------------------|--------------------|--------|
| 1977 | 888 | | | 274 | | | 414 | 1,576 |
| 1978 | 859 | | | 0 | | | 380 | 1,239 |
| 1979 | 1,478 | | | 0 | 1,525 | | 613 | 3,616 |
| 1980 | 2,127 | | | 0 | 2,660 | | 887 | 5,674 |
| 1981 | 1,619 | 450 | | 0 | 3,245 | | 766 | 6,080 |
| 1982 | 1,865 | 880 | | 0 | 608 | | 1268 | 4,621 |
| 1983 | 2,787 | 1,277 | | 0 | 1,632 | | 8601 | 14,297 |
| 1984 | 6,385 | 823 | 187 | 200 | 661 | | 984 | 9,240 |
| 1985 | 2,894 | 1,037 | 142 | 120 | 1,179 | 109 | 131 | 5,612 |
| 1986 | 3,616 | 905 | 28 | 61 | 789 | 39 | 571 | 6,009 |
| 1987 | 3,513 | 1,105 | 254 | 18 | 869 | 1,087 | 1939 | 8,785 |
| 1988 | 2,310 | 1,928 | 200 | 36 | 346 | 2,037 | 1219 | 8,076 |
| 1989 | 2,315 | 1,322 | 204 | 98 | 683 | 2,900 | 1518 | 9,040 |
| 1990 | 891 | 2,219 | 29 | 19 | 271 | 2,238 | 921 | 6,588 |
| 1991 | 1,722 | 1,459 | 19 | 56 | 47 | 565 | 1100 | 4,968 |
| 1992 | 1,274 | 1,471 | 173 | 8 | 633 | 1,241 | 549 | 5,349 |
| 1993 | 2,487 | 1,041 | 211 | 134 | 453 | 598 | 1002 | 5,926 |
| 1994 | 1,809 | 1,258 | 133 | 76 | 807 | 476 | 523 | 5,082 |
| 1995 | 1,116 | 990 | 190 | 31 | 895 | 651 | 476 | 4,349 |
| 1996 | 2,286 | 1,077 | 84 | 42 | 444 | 68 | 306 | 4,307 |
| 1997 | 1,845 | 864 | 100 | 20 | 1,008 | 122 | 136 | 4,095 |
| 1998 | 872 | 1,220 | 57 | 212 | 2,906 | 154 | 78 | 5,499 |
| 1999 | 1,282 | 614 | 151 | 11 | 1,080 | 432 | 88 | 3,658 |
| 2000 | 3,661 | 1,543 | 764 | | 1,118 | 21 | 429 | 7,536 |
| 2001 | 1,959 | 922 | 999 | | 314 | 10 | 124 | 4,328 |
| 2002 | 2,133 | 1,268 | 529 | 12 | 319 | 147 | 211 | 4,619 |
| 2003 | 3,337 | 1,554 | 122 | 0 | 961 | 57 | 575 | 6,606 |
| 2004 | 2,776 | 2,499 | 491 | 33 | 719 | 400 | 230 | 7,148 |
| 2005 | 1,442 | 848 | 362 | 0 | 538 | 79 | 191 | 3,460 |
| 2006 | 1,556 | 2,173 | 289 | 260 | 279 | 0 | 65 | 4,622 |
| 2007 | 2,387 | 3,001 | 397 | 70 | 766 | 289 | 120 | 7,030 |
| 2008 | 1,699 | 4,187 | 81 | 30 | 672 | 26 | 0 | 6,695 |
| 2009 | 1,152 | 2,612 | 865 | 165 | 341 | 647 | 215 | 5,997 |
| 2010 | 1,257 | 2,440 | 689 | 242 | 256 | 632 | 114 | 5,630 |
| 2011 | 295 | 1,852 | 301 | 161 | 893 | 87 | 130 | 3,719 |
| 2012 | 506 | 1,348 | 45 | 0 | 193 | 548 | 45 | 2,685 |
| Average | | | | | | | | |
| 2008–2012 | 982 | 2,488 | 396 | 120 | 471 | 388 | 101 | 4,945 |
| 2013 | 271 | 1,596 | 248 | 320 | 80 | 193 | 41 | 2,749 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

^a Majority of harvest from Nancy Lake Creek.

^b Knik River and tributaries including Jim Creek.

^c Big Lake drainage streams.

^d Includes Nancy Lake complex lakes, all marine harvest, and miscellaneous lakes and streams.

Table 52.—Eastside Susitna River drainage sockeye salmon harvest by fishery, 1977–2013.

| Year | Willow Creek | Little Willow | Kashwitna River | Caswell Creek | Sheep Creek | Goose Creek | Montana Creek | Birch Creek | Sunshine Creek | Talkeetna River ^a | Other streams ^b | Other lakes | Total |
|------|--------------|---------------|-----------------|---------------|-------------|-------------|---------------|-------------|----------------|------------------------------|----------------------------|-------------|-------|
| 1977 | 831 | 305 | | | 450 | | 978 | | | 334 | 696 | | 3,594 |
| 1978 | 56 | 28 | | | 14 | | 85 | | | 28 | 56 | | 267 |
| 1979 | 94 | 141 | | 0 | 31 | | 346 | | 157 | 31 | 220 | | 1,020 |
| 1980 | 83 | 77 | | 77 | 0 | | 257 | | 116 | 6 | 257 | | 873 |
| 1981 | 77 | 67 | | 38 | 105 | | 182 | | 220 | 29 | 115 | | 833 |
| 1982 | 94 | 105 | | 52 | 88 | | 514 | | 189 | 115 | 398 | | 1,555 |
| 1983 | 425 | 110 | 0 | 151 | 370 | | 534 | | 685 | 534 | 343 | 69 | 3,221 |
| 1984 | 249 | 337 | 0 | 87 | 62 | 0 | 561 | | 100 | 636 | 636 | 37 | 2,705 |
| 1985 | 139 | 80 | | 110 | 30 | | 279 | | 249 | 508 | 70 | 0 | 1,465 |
| 1986 | 290 | 0 | 109 | 0 | 0 | 0 | 363 | 182 | 290 | 1,597 | 1,198 | 0 | 4,029 |
| 1987 | 254 | 72 | 54 | 0 | 163 | 0 | 163 | 72 | 181 | 580 | 507 | 0 | 2,046 |
| 1988 | 564 | 55 | 18 | 164 | 273 | 36 | 364 | 255 | 18 | 1,110 | 0 | 0 | 2,857 |
| 1989 | 414 | 51 | 59 | 110 | 169 | 17 | 296 | 76 | 363 | 617 | 25 | 330 | 2,527 |
| 1990 | 208 | 149 | 99 | 69 | 149 | 50 | 149 | 0 | 119 | 1,506 | 179 | 0 | 2,677 |
| 1991 | 397 | 71 | 62 | 230 | 168 | 0 | 44 | 97 | 88 | 1,280 | 460 | 0 | 2,897 |
| 1992 | 526 | 164 | 33 | 123 | 189 | 58 | 370 | 140 | 394 | 1,356 | 115 | 0 | 3,468 |
| 1993 | 528 | 120 | 0 | 106 | 39 | 0 | 237 | 241 | 183 | 2,560 | 113 | 10 | 4,137 |
| 1994 | 383 | 28 | 0 | 82 | 102 | 0 | 85 | 66 | 133 | 2,278 | 286 | 0 | 3,443 |
| 1995 | 430 | 73 | 0 | 0 | 98 | 52 | 481 | 0 | 220 | 2,082 | 145 | 101 | 3,682 |
| 1996 | 113 | 191 | 0 | 95 | 8 | 67 | 88 | 0 | 43 | 2,053 | 17 | 0 | 2,675 |
| 1997 | 119 | 85 | 41 | 30 | 190 | 70 | 144 | 11 | 60 | 4,931 | 170 | 0 | 5,851 |
| 1998 | 86 | 43 | 0 | 0 | 103 | 0 | 195 | 30 | 68 | 4,546 | 788 | 0 | 5,859 |
| 1999 | 162 | 64 | 11 | 0 | 112 | 32 | 248 | 184 | 0 | 3,197 | 382 | 216 | 4,608 |
| 2000 | 307 | 55 | 0 | 42 | 122 | 0 | 346 | 213 | 199 | 4,683 | 225 | 317 | 6,509 |
| 2001 | 244 | 70 | 58 | 0 | 269 | 48 | 584 | 77 | 48 | 4,797 | 344 | 237 | 6,776 |
| 2002 | 215 | 31 | 0 | 0 | 122 | 30 | 199 | 0 | 31 | 2,615 | 110 | 74 | 3,427 |
| 2003 | 147 | 63 | 0 | 0 | 74 | 27 | 267 | 105 | 116 | 1,574 | 361 | 0 | 2,734 |
| 2004 | 110 | 45 | 0 | 0 | 20 | 0 | 336 | 33 | 109 | 2,399 | 55 | 0 | 3,107 |
| 2005 | 85 | 91 | 0 | 0 | 84 | 0 | 113 | 0 | 24 | 1,280 | 0 | 0 | 1,677 |

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Table 52.–Page 2 of 2.

| Year | Willow Creek | Little Willow | Kashwitna River | Caswell Creek | Sheep Creek | Goose Creek | Montana Creek | Birch Creek | Sunshine Creek | Talkeetna River ^a | Other streams ^b | Other lakes | Total |
|-----------|--------------|---------------|-----------------|---------------|-------------|-------------|---------------|-------------|----------------|------------------------------|----------------------------|-------------|-------|
| 2006 | 378 | 55 | 183 | 0 | 18 | 0 | 499 | 0 | 44 | 110 | 60 | 65 | 1,412 |
| 2007 | 90 | 201 | 0 | 0 | 45 | 0 | 89 | 0 | 0 | 952 | 93 | 0 | 1,470 |
| 2008 | 45 | 30 | 0 | 0 | 32 | 120 | 794 | 205 | 75 | 1,517 | 157 | 0 | 2,975 |
| 2009 | 96 | 13 | 36 | 0 | 48 | 17 | 184 | 299 | 50 | 6,137 | 444 | 0 | 7,324 |
| 2010 | 0 | 15 | 149 | 0 | 15 | 0 | 134 | 0 | 17 | 3,382 | 232 | 0 | 3,944 |
| 2011 | 185 | 0 | 0 | 15 | 0 | 0 | 0 | 186 | 56 | 1,458 | 559 | 0 | 2,459 |
| 2012 | 48 | 20 | 0 | 0 | 16 | 0 | 59 | 63 | 28 | 3,817 | 226 | 0 | 4,277 |
| Average | | | | | | | | | | | | | |
| 2008–2012 | 75 | 16 | 37 | 3 | 22 | 27 | 234 | 151 | 45 | 3,262 | 324 | 0 | 4,196 |
| 2013 | 171 | 43 | 0 | 0 | 0 | 0 | 98 | 14 | 0 | 3,527 | 317 | 0 | 4,170 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

^a Talkeetna River and tributaries including Clear Creek and Larson Creek.

^b Other includes lakes and streams for 1977–1982.

Table 53.—Westside Susitna River drainage sockeye salmon harvest by fishery, 1977–2013.

| Year | Alexander Creek | Deshka River | Rabideux Creek | Yentna River | Lake Creek | Fish Creek ^a | Talachulitna River | Judd Lake | Other streams ^b | Other lakes ^b | Total |
|------|--------------------|-----------------|-------------------|-----------------|---------------|----------------------------|-----------------------|--------------|-------------------------------|-----------------------------|-------|
| 1977 | 349 | 0 | | | 658 | | 457 | 24 | 842 | 456 | 2,786 |
| 1978 | 183 | 0 | | | 254 | | 141 | 70 | 662 | 324 | 1,634 |
| 1979 | 79 | 0 | | | 440 | | 47 | 220 | 362 | 410 | 1,557 |
| 1980 | 52 | 0 | | | 267 | | 112 | 267 | 34 | 379 | 1,111 |
| 1981 | 67 | 0 | | | 211 | | 172 | | 594 | 364 | 1,408 |
| 1982 | 335 | 0 | | | 252 | | 63 | | 1,320 | 911 | 2,881 |
| 1983 | 69 | 0 | | | 726 | | 41 | 0 | 1,370 | 1,314 | 3,549 |
| 1984 | 87 | 125 | | | 374 | | 262 | 312 | 1,395 | 860 | 3,415 |
| 1985 | 261 | 50 | | | 137 | | 50 | | 772 | 1,032 | 2,302 |
| 1986 | 0 | 11 | | | 547 | 1,273 | 424 | 514 | 1,173 | 134 | 4,076 |
| 1987 | 72 | 272 | | | 435 | 398 | 290 | 580 | 163 | 217 | 2,427 |
| 1988 | 55 | 146 | | | 291 | 146 | 800 | 182 | 1,038 | 509 | 3,167 |
| 1989 | 260 | 217 | 9 | 139 | 121 | 165 | 251 | 130 | 547 | 468 | 2,307 |
| 1990 | 30 | 189 | 0 | 20 | 358 | 89 | 189 | | 646 | 417 | 1,938 |
| 1991 | 136 | 262 | 155 | 0 | 262 | 475 | 78 | 233 | 968 | 514 | 3,083 |
| 1992 | 123 | 82 | 0 | 107 | 115 | 189 | 205 | | 1,331 | 764 | 2,916 |
| 1993 | 45 | 87 | | 103 | 489 | 412 | 171 | | 724 | 130 | 2,161 |
| 1994 | 38 | 0 | | 237 | 430 | 142 | 237 | | 653 | 182 | 1,919 |
| 1995 | 94 | 42 | | 239 | 392 | 178 | 191 | | 879 | 91 | 2,106 |
| 1996 | 0 | 8 | | 0 | 137 | 68 | 108 | | 794 | | 1,115 |
| 1997 | 61 | 11 | | 410 | 1,656 | 209 | 335 | | 427 | 0 | 3,109 |
| 1998 | 86 | 57 | 0 | 232 | 868 | 168 | 181 | | 871 | | 2,463 |
| 1999 | 205 | 50 | | 324 | 2,604 | 865 | 337 | | 894 | 0 | 5,279 |
| 2000 | 1,440 | 339 | | 761 | 1,767 | 226 | 162 | | 251 | | 4,946 |
| 2001 | 544 | 249 | | 397 | 3,149 | 714 | 159 | | 1062 | 37 | 6,311 |
| 2002 | 257 | 67 | | 94 | 526 | 238 | 278 | | 421 | 0 | 1,881 |
| 2003 | 138 | 0 | | 137 | 6,900 | 162 | 233 | | 1090 | 0 | 8,660 |
| 2004 | 0 | 154 | | 247 | 1,977 | 392 | 339 | | 249 | | 3,358 |
| 2005 | 0 | 70 | | 54 | 1,622 | 410 | 34 | | 29 | | 2,219 |

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Table 53.–Page 2 of 2.

| Year | Alexander Creek | Deshka River | Rabideux Creek | Yentna River | Lake Creek | Fish Creek ^a | Talachulitna River | Judd Lake | Other streams ^b | Other lakes ^b | Total |
|-----------|--------------------|-----------------|-------------------|-----------------|---------------|----------------------------|-----------------------|--------------|-------------------------------|-----------------------------|-------|
| 2006 | 66 | 92 | 11 | 48 | 214 | 0 | 195 | 0 | | | 626 |
| 2007 | 30 | 128 | 0 | 604 | 1,341 | 221 | 816 | 37 | 0 | 0 | 3,177 |
| 2008 | 0 | 0 | 0 | 141 | 737 | 197 | 246 | 107 | 0 | 0 | 1,428 |
| 2009 | 0 | 10 | 0 | 547 | 1,256 | 37 | 11 | 0 | 497 | 0 | 2,358 |
| 2010 | 0 | 33 | 0 | 560 | 407 | 20 | 424 | 0 | 61 | 0 | 1,505 |
| 2011 | 0 | 0 | 0 | 497 | 1,351 | 131 | 737 | 0 | 697 | 0 | 3,413 |
| 2012 | 0 | 0 | 0 | 231 | 669 | 0 | 111 | 0 | 107 | 0 | 1,118 |
| Average | | | | | | | | | | | |
| 2008–2012 | 0 | 9 | 0 | 395 | 884 | 77 | 306 | 21 | 272 | 0 | 1,964 |
| 2013 | 0 | 0 | 0 | 392 | 3,739 | 0 | 994 | 0 | 65 | 0 | 5,190 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

^a Yentna River drainage.

^b May include harvest from West Cook Inlet waters.

Table 54.—West Cook Inlet drainage sockeye salmon harvest by fishery, 1977–2013.

| Year | Chuitna River | Theodore River | Lewis River | Kustatan River | Big River Lakes ^a | Susitna R.—N. Foreland | South of N. Foreland | Other ^b | Total |
|------|---------------|----------------|-------------|----------------|------------------------------|------------------------|----------------------|--------------------|-------|
| 1977 | 6 | 0 | 0 | | | | | | 6 |
| 1978 | 0 | 0 | 0 | | | | | | 0 |
| 1979 | 0 | 0 | 0 | | | | | | 0 |
| 1980 | 0 | 0 | 0 | | | | | | 0 |
| 1981 | 48 | 0 | | | | | | | 48 |
| 1982 | 10 | 0 | | | | | | | 10 |
| 1983 | 356 | 0 | | 110 | | | | | 466 |
| 1984 | 62 | 0 | | 187 | | | | | 249 |
| 1985 | 274 | 25 | 0 | 162 | | | | | 461 |
| 1986 | 22 | 67 | | 0 | | | | | 89 |
| 1987 | 272 | 0 | 0 | 0 | | | | | 272 |
| 1988 | 437 | 18 | 0 | 18 | | | | | 473 |
| 1989 | 43 | 52 | 0 | 165 | | | | 269 | 529 |
| 1990 | 139 | 50 | 0 | 10 | 437 | | | | 636 |
| 1991 | 552 | 10 | 0 | 203 | | | | | 765 |
| 1992 | 8 | 49 | | 131 | | | | | 188 |
| 1993 | 46 | 35 | 0 | 289 | 976 | | 229 | 780 | 2,355 |
| 1994 | 0 | 9 | | 285 | 1,013 | | 114 | 614 | 2,035 |
| 1995 | 62 | 0 | | 44 | 998 | | 159 | 41 | 1,304 |
| 1996 | 228 | 0 | | 102 | 2,028 | 127 | 152 | 314 | 2,951 |
| 1997 | 170 | 0 | | 274 | 1,171 | 150 | 409 | 0 | 2,174 |
| 1998 | 235 | 8 | | 314 | 1,282 | 266 | 288 | 129 | 2,522 |
| 1999 | 194 | 0 | | 186 | 1,783 | 76 | 464 | 287 | 2,990 |
| 2000 | 58 | 42 | | 210 | 3,047 | 210 | 677 | 0 | 4,244 |
| 2001 | 634 | 0 | | 293 | 992 | 201 | 1,030 | 0 | 3,150 |
| 2002 | 585 | 0 | 0 | 232 | 664 | 24 | 160 | 354 | 2,019 |
| 2003 | 179 | 24 | 0 | 397 | 3,491 | 94 | 372 | 151 | 4,708 |
| 2004 | 23 | 0 | | 89 | 2,793 | 294 | 23 | 101 | 3,323 |
| 2005 | 123 | | | 95 | 3,401 | 121 | 139 | 146 | 4,025 |

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Table 54.–Page 2 of 2.

| Year | Chuitna River | Theodore River | Lewis River | Kustatan River | Big River Lakes ^a | Susitna R.–N. Foreland | South of N. Foreland | Other ^b | Total |
|----------------|---------------|----------------|-------------|----------------|------------------------------|------------------------|----------------------|--------------------|-------|
| 2006 | 0 | 11 | 0 | 95 | 3,980 | 306 | 458 | 143 | 4,993 |
| 2007 | 104 | 0 | 0 | 102 | 7,028 | 252 | 568 | 133 | 8,187 |
| 2008 | 0 | 0 | 0 | 429 | 4,436 | 238 | 393 | 156 | 5,652 |
| 2009 | 0 | 0 | 0 | 157 | 3,746 | 120 | 238 | 0 | 4,261 |
| 2010 | 0 | 0 | 0 | 176 | 3,646 | 57 | 1,247 | 106 | 5,232 |
| 2011 | 17 | 0 | 0 | 0 | 3,932 | 307 | 156 | 0 | 4,412 |
| 2012 | 0 | 0 | 0 | 0 | 4,474 | 144 | 80 | 268 | 4,966 |
| <i>Average</i> | | | | | | | | | |
| 2008–2012 | 3 | 0 | | 152 | 4,047 | 173 | 423 | 106 | 4,905 |
| 2013 | 19 | 0 | 0 | 228 | 4,025 | 162 | 569 | | 5,003 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

^a The majority of the harvest occurs at the mouth of Wolverine Creek.

^b Includes lakes and streams. Beginning in 1999, this category includes saltwater shoreline.

Table 55.—Sockeye salmon escapement estimates from Knik Arm and Eastside Susitna River drainages in the Northern Cook Inlet Management Area, 1969–2013.

| Year | Knik Arm | | | | | Eastside Susitna | |
|------|--|------------------------------|------------------------|--------------------|----------------|---------------------|-------------------|
| | Little Susitna River weir ^a | Fish Creek weir ^a | Cotton-wood Creek weir | Wasilla Creek weir | Jim Creek weir | Larson Lake weir | Stephan Lake weir |
| 1969 | | 12,456 | | | | | |
| 1970 | | 25,000 | | | | | |
| 1971 | | 31,470 | | | | | |
| 1972 | | 6,981 | | | | | |
| 1973 | | 2,705 | | | | | |
| 1974 | | 16,225 | | | | | |
| 1975 | | 29,882 | | | | | |
| 1976 | | 14,032 | | | | | |
| 1977 | | 5,183 | | | | | |
| 1978 | | 3,555 | | | | | |
| 1979 | | 68,739 ^b | | | | | |
| 1980 | | 62,828 ^{b,c} | | | | | |
| 1981 | | 50,479 ^{b,c} | | | | | |
| 1982 | | 28,164 ^c | | | | | |
| 1983 | | 118,797 ^{b,c} | | | | | |
| 1984 | | 192,352 ^{b,c} | | | | 35,254 ^d | |
| 1985 | | 68,577 ^{b,c} | | | | 37,874 ^d | |
| 1986 | | 29,800 ^{b,c} | | | | 32,322 ^d | |
| 1987 | | 91,215 ^{b,c} | | | | 16,753 ^d | |
| 1988 | 2,642 | 71,603 ^{b,c} | | | | | |
| 1989 | 6,203 | 67,224 ^{b,c} | | | | | |
| 1990 | | 48,717 ^{b,c} | | | | | |
| 1991 | | 50,500 ^{b,c} | | | | | |
| 1992 | | 72,108 ^{b,c} | | | | | |
| 1993 | | 117,619 ^{b,c} | | | 3,548 | | |
| 1994 | 16,918 | 100,638 ^b | | | 5,197 | | |
| 1995 | 7,129 | 115,101 ^b | | | | | |
| 1996 | | 63,164 ^b | | | | | |
| 1997 | | 55,035 ^b | 8,224 | | | 40,112 | |
| 1998 | | 22,865 ^b | 27,930 | 840 | | 63,514 | |
| 1999 | | 26,725 ^b | 39,572 | 854 | | 18,943 | |
| 2000 | | 19,533 ^b | 16,921 | 245 | | 11,822 | |
| 2001 | | 43,498 ^b | 15,229 | 198 | | | |
| 2002 | | 90,482 ^b | 6,791 | 1,354 | | | |
| 2003 | | 91,952 ^b | 4,601 | 757 | | | |
| 2004 | | 22,157 ^b | 3,127 | | | | |
| 2005 | | 14,215 ^b | | | | 9,959 | |

-continued-

Table 55.—Page 2 of 2.

| Year | Knik Arm | | | | | Eastside Susitna | |
|-----------|---------------------------|------------------------------|------------------------|--------------------|-----------------------------|------------------|-------------------|
| | Little Susitna River weir | Fish Creek weir ^a | Cotton-wood Creek weir | Wasilla Creek weir | Jim Creek weir ^c | Larson Lake weir | Stephan Lake weir |
| 2006 | | 32,562 ^b | | | | 56,305 | |
| 2007 | | 27,948 ^b | | | | 47,819 | 4,120 |
| 2008 | | 19,339 ^b | | | | 35,040 | 5,000 |
| 2009 | | 83,480 ^b | | | | 41,929 | |
| 2010 | | 126,836 ^b | | | | 20,324 | |
| 2011 | | 66,678 | | | | 12,393 | |
| 2012 | | 18,823 | | | | 16,708 | |
| Average | | | | | | | |
| 1979–2012 | 8,223 | 64,110 | 15,299 | 708 | | 31,067 | – |
| 2003–2012 | – | 50,399 | – | – | – | – | – |
| 2008–2012 | – | 63,031 | – | – | – | – | – |
| 2013 | 367 | 18,912 | | | | 21,821 | |
| SEG | | 20,000– 70,000 | | | | 15,000– 50,000 | |

Note: An endash indicates that the value can't be computed due to limitations of the data and SEG is sustainable escapement goal.

Source: Little Susitna River weir: Bartlett and Vincent-Lang (1989), Bartlett and Sonnichsen (1990), Bartlett (1996a, 1996b). Jim Creek weir: Bartlett (unpublished b-c).

^a Fish Creek weir locations were river mile (RM) 0.6 in 1969–1982, about RM 7.5 in 1983–1991, and RM 3.0 (1992–2006).

^b Hatchery-reared sockeye salmon contributed to Fish Creek drainage escapements in 1979–1981 and 1983–2010.

^c Foot survey counts below the Fish Creek weir site are included in the 1980–1993 data.

^d CIAA (1988b).

Table 56.—Sockeye salmon escapement estimates from Westside Susitna River and West Cook Inlet drainages in the Northern Cook Inlet Management Area, 1969–2013.

| Year | Westside Susitna River | | | | | | | West Cook Inlet | | |
|------|------------------------|---------------------|----------------|--------------------|---------------------|------------|-----------|----------------------|---------------------------------|------------------------------|
| | Yentna River sonar | Chelatna Lake weir | Judd Lake weir | Shell Lake weir | Hewitt Lake weir | Byers Lake | Swan Lake | Crescent River sonar | Packers Creek weir ^a | Wolverine Creek ^b |
| 1969 | | | | | | | | | | |
| 1970 | | | | | | | | | | |
| 1971 | | | | | | | | | | |
| 1972 | | | | | | | | | | |
| 1973 | | | | | | | | | | |
| 1974 | | | | | | | | | | |
| 1975 | | | | | | | | | | |
| 1976 | | | | | | | | | | |
| 1977 | | | | | | | | | | |
| 1978 | | | | | | | | | | |
| 1979 | | | | | | | | 87,000 | | |
| 1980 | | | | | | | | 91,000 | 16,477 | |
| 1981 | 139,401 ^c | | | | | | | 41,000 | 13,024 | 17,822 ^d |
| 1982 | 113,847 ^c | | | | | | | 59,000 | 15,687 | 32,950 ^d |
| 1983 | 104,414 ^c | | | | | | | 92,000 | 18,403 | 18,189 ^d |
| 1984 | 149,375 ^c | | | | | | | 118,000 | 30,684 | |
| 1985 | 107,124 ^c | | | | | | | 129,000 | 36,850 | |
| 1986 | 92,000 | | | 4,237 ^e | | | | N/C | 29,604 | |
| 1987 | 66,000 | | | | | | | 119,000 | 35,401 | |
| 1988 | 52,347 | | | | | | | 57,716 | 18,607 | |
| 1989 | 96,269 | | | | | | | 71,064 | 22,304 | |
| 1990 | 140,379 | | | | 12,943 ^f | | | 52,180 | 31,868 | |
| 1991 | 105,000 | | | | | | | 44,500 | 41,275 | |
| 1992 | 66,057 | | | | | | | 58,227 | 28,361 | |
| 1993 | 141,694 | 20,235 ^g | | | | | | 37,556 | 40,869 | |
| 1994 | 128,032 | 28,303 ^g | | | | | | 30,355 | 30,788 | |
| 1995 | 121,479 | 20,104 ^g | | | | | | 52,250 | 29,473 | |
| 1996 | 90,781 | 28,684 ^g | | | | | | 28,729 | 17,767 | |
| 1997 | 157,797 | 84,899 ^g | | | | | | 70,768 | 19,364 | |
| 1998 | 119,623 | 27,284 ^g | 34,416 | | | | | 62,257 | 17,732 | |
| 1999 | 99,029 | | | | | | | 68,985 | 16,860 | |
| 2000 | 123,749 | | | | | | | 56,599 | 20,151 | |
| 2001 | 83,532 | | | | | | | 78,081 | no count | |
| 2002 | 78,430 | | | | | | | 62,833 | no count | |
| 2003 | 181,404 | | | | | | | 122,909 | no count | |
| 2004 | 71,281 | | | | | | | 103,183 | no count | 10,541 ^h |
| 2005 | 36,921 | | | | | | | 125,787 | 22,000 | 15,625 ^{h,i} |

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Table 56.–Page 2 of 2.

| Year | Westside Susitna River | | | | | | | West Cook Inlet | | |
|-----------|------------------------|--------------------|-------------------|-----------------|------------------|------------|-----------|--------------------------------|---------------------------------|------------------------------|
| | Yentna River sonar | Chelatna Lake weir | Judd Lake weir | Shell Lake weir | Hewitt Lake weir | Byers Lake | Swan Lake | Crescent River sonar | Packers Creek weir ^a | Wolverine Creek ^b |
| 2006 | 92,045 | 13,266 | 40,630 | 69,747 | 2,507 | 3,074 | | 92,533 | no count | 2,000 ^{h,i} |
| 2007 | 79,901 | 11,671 | 58,134 | 26,784 | | 1,701 | 5,489 | 79,406 | 46,637 | |
| 2008 | 90,146 | 73,469 | 54,304 | 2,624 | | 1,492 | 4,037 | 62,030 | 25,247 | |
| 2009 | ^j | 17,865 | 43,153 | 4,961 | | | | no count | 16,473 | |
| 2010 | ^j | 37,784 | 18,361 | 2,222 | | | | 86,333 | no count | |
| 2011 | ^j | 70,353 | 39,997 | 937 | | | | 81,952 | no count | |
| 2012 | ^j | 36,577 | 18,303 | no count | | | | 58,838 | no count | |
| Average | | | | | | | | | | |
| 1979–2012 | 104,573 | 36,192 | 38,412 | 15,930 | – | – | – | 74,408 | 25,676 | – |
| 2003–2012 | 91,950 | – | – | – | – | – | – | 90,330 | – | – |
| 2008–2012 | 90,146 | – | – | – | – | – | – | 72,288 | – | – |
| 2013 | | 70,555 | 14,021 | 133 | | | | no count | no count | |
| SEG | ^k | 20,000– 65,000 | 25,000– 55,000 | | | | | 30,000– 50,000 ^l | 15,000– 30,000 | |

^a A remote camera was used to count fish beginning in 2005.

^b Tributary of Big River Lakes. A weir was operated by Cook Inlet Aquaculture Association (CIAA) from 1981 to 1983. A remote camera was operated by ADF&G from 2004 to 2006.

^c Davis (2000).

^d CIAA (1981–1982, 1984).

^e CIAA (1987).

^f CIAA (1991).

^g CIAA (1998a)

^h This was an incomplete count because of problems with the video cassette recording (VCR) tapes self-ejecting and because the digital video recorder (DVR) camera system was down for 2 weeks in 2005.

ⁱ Includes 5,000 fish counted at the mouth in 2005 and 2,000 counted in 2006 on the day the camera was pulled.

^j Sonar counts discontinued.

^k Sustainable escapement goal (SEG) of 90,000–160,000 and optimum escapement goal (OEG) of 75,000–185,000 discontinued after 2008.

^l Goal discontinued after 2012, the last year of the escapement program.

Table 57.—Bodenburg Creek (Knik River drainage) salmon escapement index surveys, 1968–2013.

| Year | Month | Date | Escapement index | |
|------|-------|------|------------------|-------------|
| | | | Sockeye salmon | Chum salmon |
| 1968 | Aug | ND | 350 | 0 |
| 1969 | Sept | ND | 125 | 0 |
| 1970 | Aug | 25 | 83 | 0 |
| 1971 | Sept | 5 | 110 | 0 |
| 1972 | Aug | 31 | 464 | 0 |
| 1973 | Aug | 27 | 208 | 0 |
| 1974 | Sept | 6 | 169 | 0 |
| 1975 | Sept | 3 | 148 | 0 |
| | Sept | 19 | 0 | 3 |
| 1976 | Sept | 8 | 111 | 0 |
| 1977 | Aug | 29 | 178 | 0 |
| 1978 | Aug | 29 | 541 | 0 |
| 1979 | Aug | 29 | 321 | 0 |
| 1980 | Aug | 25 | 483 | 0 |
| 1981 | Aug | 19 | 260 | 0 |
| 1982 | Sept | 17 | 722 | 0 |
| 1983 | Aug | 31 | 359 | 0 |
| 1984 | ND | ND | ND | ND |
| 1985 | Sept | 5 | 232 | 0 |
| 1986 | Sept | 4 | 119 | 120 |
| 1987 | Sept | 3 | 77 | 1 |
| 1988 | ND | ND | ND | ND |
| 1989 | Aug | 31 | 190 | 6 |
| 1990 | Sept | 7 | 195 | 3 |
| 1991 | Aug | 27 | 0 | 1 |
| | Sept | 6 | 160 | 0 |
| 1992 | Aug | 29 | 54 | 0 |
| | Sept | 2 | 66 | 4 |
| 1993 | Aug | 24 | 212 | 14 |
| 1994 | Aug | 25 | 220 | 0 |
| | Sept | 6 | 0 | 93 |
| 1995 | Aug | 28 | 156 | 219 |
| 1996 | Sept | 4 | 111 | 0 |
| 1997 | Aug | 28 | 142 | 4 |
| 1998 | Aug | 21 | 156 | 13 |
| 1999 | Aug | 30 | 257 | 21 |
| 2000 | Aug | 28 | 228 | 5 |
| 2001 | Aug | 29 | 232 | 8 |
| 2002 | Aug | 30 | 320 | 25 |
| 2003 | Aug | 22 | 402 | 3 |
| 2004 | Aug | 26 | 283 | 0 |
| 2005 | Aug | 29 | 269 | 0 |

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Table 57.–Page 2 of 2.

| Year | Month | Date | Escapement index | |
|-----------|-------|------|------------------|-------------|
| | | | Sockeye salmon | Chum salmon |
| 2006 | Aug | 28 | 367 | 6 |
| 2007 | Aug | 24 | 164 | 2 |
| 2008 | Aug | 28 | 442 | 0 |
| 2009 | Aug | 26 | 540 | 0 |
| 2010 | Aug | 30 | 722 | 24 |
| 2011 | Sept | 2 | 493 | 1 |
| 2012 | Sept | 10 | 60 | 18 |
| Average | | | | |
| 1968–2012 | | | 245 | 13 |
| 2003–2012 | | | 374 | 5 |
| 2008–2012 | | | 451 | 9 |
| 2013 | Aug | 28 | 491 | 2 |

Source: ADF&G foot surveys.

Note: “ND” indicates there is no data because no attempts were made to collect it.

Table 58.—Northern Cook Inlet Management Area sport catch and harvest of rainbow trout by management unit, 1977–2013.

| Year | Northern Cook Inlet Management Area | | | | | | | | | | | | | |
|------|-------------------------------------|---------|--------------------|-------|--------------------|--------|--------------------|-------|--------------------|--------|---------------------|---------|-----------|---------|
| | Knik Arm | | Eastside Susitna | | Westside Susitna | | West Cook Inlet | | Total | | Southcentral Region | | Statewide | |
| | Catch ^a | Harvest | Catch ^a | Harv. | Catch ^a | Harv. | Catch ^a | Harv. | Catch ^a | Harv. | Harvest | % NCIMA | Harvest | % NCIMA |
| 1977 | | 18,615 | | 5,225 | | 7,472 | | 958 | | 32,270 | 80,345 | 40.2 | 94,307 | 34.2 |
| 1978 | | 23,139 | | 5,930 | | 12,295 | | 723 | | 42,087 | 107,243 | 39.2 | 120,231 | 35.0 |
| 1979 | | 24,843 | | 9,463 | | 12,555 | | 1,063 | | 47,924 | 129,815 | 36.9 | 139,390 | 34.4 |
| 1980 | | 29,368 | | 6,715 | | 12,785 | | 560 | | 49,428 | 126,686 | 39.0 | 153,476 | 32.2 |
| 1981 | | 41,749 | | 8,813 | | 11,296 | | 1,734 | | 63,592 | 149,460 | 42.5 | 178,613 | 35.6 |
| 1982 | | 30,549 | | 7,536 | | 11,465 | | 398 | | 49,948 | 142,579 | 35.0 | 173,242 | 28.8 |
| 1983 | | 26,421 | | 9,639 | | 9,253 | | 871 | | 46,184 | 141,705 | 32.6 | 168,677 | 27.4 |
| 1984 | | 26,418 | | 7,656 | | 8,079 | | 748 | | 42,901 | 128,649 | 33.3 | 170,117 | 25.2 |
| 1985 | | 46,431 | | 7,872 | | 8,114 | | 902 | | 63,319 | 142,316 | 44.5 | 181,991 | 34.8 |
| 1986 | | 27,690 | | 8,061 | | 6,668 | | 223 | | 42,642 | 114,873 | 37.1 | 152,855 | 27.9 |
| 1987 | | 24,663 | | 6,647 | | 8,020 | | 579 | | 39,909 | 101,397 | 39.4 | 138,698 | 28.8 |
| 1988 | | 58,609 | | 7,622 | | 8,058 | | 673 | | 74,962 | 155,960 | 48.1 | 241,831 | 31.0 |
| 1989 | | 44,518 | | 4,972 | | 4,928 | | 544 | | 54,962 | 127,444 | 43.1 | 209,961 | 26.2 |
| 1990 | 98,720 | 30,699 | 21,806 | 5,008 | 33,510 | 3,960 | 3,115 | 472 | 157,151 | 40,139 | 122,987 | 32.6 | 191,809 | 20.9 |
| 1991 | 88,645 | 39,636 | 26,329 | 7,854 | 46,870 | 4,526 | 1,756 | 497 | 163,600 | 52,513 | 127,492 | 41.2 | 205,642 | 25.5 |
| 1992 | 85,331 | 27,995 | 19,915 | 3,948 | 23,621 | 2,028 | 1,448 | 190 | 130,315 | 34,161 | 97,730 | 35.0 | 139,973 | 24.4 |
| 1993 | 69,635 | 21,565 | 24,240 | 3,713 | 29,911 | 2,481 | 1,788 | 191 | 125,574 | 27,950 | 82,312 | 34.0 | 136,681 | 20.4 |
| 1994 | 70,255 | 22,446 | 23,619 | 3,658 | 25,157 | 2,526 | 871 | 225 | 50,371 | 28,855 | 76,384 | 37.8 | 112,261 | 25.7 |
| 1995 | 56,108 | 14,878 | 15,363 | 3,138 | 23,432 | 1,757 | 1,222 | 111 | 40,217 | 19,884 | 74,972 | 26.5 | 112,681 | 17.6 |
| 1996 | 80,757 | 21,780 | 24,808 | 2,510 | 33,603 | 1,924 | 1,696 | 439 | 60,139 | 26,653 | 84,573 | 31.5 | 136,482 | 19.5 |
| 1997 | 85,278 | 25,695 | 34,742 | 2,324 | 30,217 | 1,452 | 2,371 | 618 | 67,507 | 30,089 | 67,261 | 44.7 | 100,372 | 30.0 |
| 1998 | 66,837 | 17,693 | 26,241 | 968 | 17,370 | 1,081 | 1,576 | 189 | 45,667 | 19,931 | 56,728 | 35.1 | 103,744 | 19.2 |
| 1999 | 84,691 | 24,527 | 39,753 | 1,755 | 37,864 | 1,866 | 2,617 | 277 | 80,365 | 28,425 | 77,707 | 36.6 | 132,481 | 21.5 |
| 2000 | 114,013 | 28,745 | 42,603 | 1,521 | 29,398 | 1,226 | 2,793 | 211 | 75,037 | 31,703 | 89,171 | 35.6 | 144,873 | 21.9 |
| 2001 | 70,821 | 21,061 | 32,904 | 1,112 | 27,697 | 759 | 3,341 | 270 | 65,140 | 23,202 | 57,629 | 40.3 | 81,279 | 28.5 |
| 2002 | 93,520 | 28,325 | 80,190 | 1,751 | 29,745 | 1,209 | 3,082 | 236 | 113,405 | 31,521 | 73,542 | 42.9 | 117,063 | 26.9 |
| 2003 | 68,212 | 17,617 | 59,440 | 2,581 | 40,327 | 1,425 | 1,698 | 264 | 102,044 | 21,887 | 53,155 | 41.2 | 84,531 | 25.9 |
| 2004 | 70,897 | 17,738 | 46,130 | 1,924 | 42,969 | 1,629 | 1,258 | 177 | 90,568 | 21,468 | 56,082 | 38.3 | 85,136 | 25.2 |
| 2005 | 59,870 | 14,367 | 36,188 | 793 | 46,575 | 339 | 791 | 196 | 84,785 | 15,695 | 39,790 | 39.4 | 60,826 | 25.8 |

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Table 58.–Page 2 of 2.

| Northern Cook Inlet Management Area | | | | | | | | | | | | | | |
|-------------------------------------|--------------------|---------|--------------------|-------|--------------------|-------|--------------------|-------|--------------------|--------|---------------------|---------|-----------|---------|
| Year | Knik Arm | | Eastside Susitna | | Westside Susitna | | West Cook Inlet | | Total | | Southcentral Region | | Statewide | |
| | Catch ^a | Harvest | Catch ^a | Harv. | Harvest | % NCIMA | Harvest | % NCIMA |
| 2006 | 48,064 | 13,524 | 38,862 | 1,590 | 44,018 | 1,027 | 1,538 | 170 | 84,960 | 16,311 | 33,119 | 49.2 | 53,086 | 30.7 |
| 2007 | 40,742 | 10,613 | 64,077 | 840 | 32,036 | 619 | 2,124 | 216 | 98,367 | 12,288 | 30,361 | 40.5 | 50,231 | 24.5 |
| 2008 | 67,585 | 15,537 | 36,798 | 1,521 | 18,063 | 744 | 1,276 | 106 | 56,381 | 17,908 | 36,334 | 49.3 | 49,159 | 36.4 |
| 2009 | 39,983 | 7,981 | 36,707 | 691 | 27,455 | 865 | 1,322 | 10 | 65,510 | 9,547 | 23,365 | 40.9 | 35,976 | 26.5 |
| 2010 | 42,267 | 10,845 | 39,958 | 1,826 | 20,232 | 434 | 746 | 89 | 61,085 | 13,194 | 25,712 | 51.3 | 38,941 | 33.9 |
| 2011 | 44,805 | 9,368 | 63,725 | 977 | 38,060 | 341 | 843 | 43 | 102,740 | 10,729 | 23,073 | 46.5 | 32,098 | 33.4 |
| 2012 | 29,680 | 8,294 | 27,446 | 623 | 24,718 | 179 | 376 | 102 | 52,583 | 9,198 | 21,912 | 42.0 | 29,942 | 30.7 |
| Average | | | | | | | | | | | | | | |
| 1977– | | | | | | | | | | | | | | |
| 2012 | 68,553 | 24,276 | 37,471 | 4,133 | 31,428 | 4,316 | 1,724 | 424 | 85,805 | 33,149 | 85,552 | 38.7 | 121,074 | 27.4 |
| 2008– | | | | | | | | | | | | | | |
| 2012 | 44,864 | 10,405 | 40,927 | 1,128 | 25,706 | 513 | 913 | 70 | 67,660 | 12,115 | 26,079 | 46.0 | 37,223 | 32.2 |
| 2013 | 52,070 | 9,195 | 44,029 | 1,248 | 20,178 | 468 | 876 | 0 | 65,121 | 10,911 | 29,931 | 36.5 | 40,589 | 26.9 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996– . Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish. Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

^a Catch data not available until 1990.

Table 59.—Eastside Susitna River drainage rainbow trout harvest by fishery, 1977–2013.

| Year | Willow Creek | Little Willow | Kashwitna River | Caswell Creek | Sheep Creek | Goose Creek | Montana Creek | Birch Creek | Sunshine Creek | Talkeetna River ^a | Other streams ^b | Other lakes | Total |
|------|--------------|---------------|-----------------|---------------|-------------|-------------|---------------|-------------|----------------|------------------------------|----------------------------|-------------|-------|
| 1977 | 1,055 | 224 | | | 368 | | 727 | | | 450 | 2,401 | | 5,225 |
| 1978 | 913 | 334 | | | 470 | | 1,193 | | | 1,501 | 1,519 | | 5,930 |
| 1979 | 1,500 | 345 | | 282 | 573 | | 1,536 | | 382 | 1,373 | 3,472 | | 9,463 |
| 1980 | 1,168 | 353 | | 154 | 385 | | 854 | | 193 | 950 | 2,658 | | 6,715 |
| 1981 | 1,475 | 374 | | 326 | 201 | | 1,111 | | 249 | 1,226 | 3,851 | | 8,813 |
| 1982 | 891 | 335 | | 189 | 325 | | 2,243 | | 545 | 608 | 2,400 | | 7,536 |
| 1983 | 1,689 | 514 | 357 | 231 | 409 | | 1,332 | | 178 | 1,836 | 1,656 | 1,437 | 9,639 |
| 1984 | 1,359 | 1,047 | 449 | 175 | 349 | 125 | 1,197 | | 374 | 910 | 598 | 1,073 | 7,656 |
| 1985 | 2,046 | 746 | | 139 | 191 | | 1,248 | | 416 | 832 | 1,266 | 988 | 7,872 |
| 1986 | 545 | 218 | 436 | 0 | 218 | 145 | 399 | 73 | 581 | 1,234 | 1,126 | 3,086 | 8,061 |
| 1987 | 1,141 | 1,213 | 471 | 308 | 507 | 272 | 417 | 36 | 72 | 869 | 471 | 870 | 6,647 |
| 1988 | 1,128 | 400 | 255 | 73 | 236 | 291 | 1,492 | 73 | 55 | 1,110 | 636 | 1,873 | 7,622 |
| 1989 | 906 | 277 | 675 | 37 | 240 | 240 | 407 | 37 | 259 | 822 | 443 | 629 | 4,972 |
| 1990 | 1,008 | 286 | 352 | 101 | 286 | 353 | 487 | | 168 | 1,109 | 320 | 538 | 5,008 |
| 1991 | 2,044 | 430 | 261 | 384 | 569 | 354 | 615 | 231 | 0 | 1,076 | 999 | 891 | 7,854 |
| 1992 | 712 | 293 | 87 | 47 | 55 | 79 | 467 | 16 | 79 | 665 | 404 | 1,044 | 3,948 |
| 1993 | 934 | 264 | 49 | 148 | 338 | 127 | 271 | 0 | 59 | 242 | 670 | 611 | 3,713 |
| 1994 | 1,161 | 337 | 114 | 53 | 254 | 173 | 241 | 0 | 8 | 262 | 467 | 588 | 3,658 |
| 1995 | 351 | 250 | 0 | 56 | 79 | 28 | 285 | 0 | 0 | 287 | 442 | 1,360 | 3,138 |
| 1996 | 551 | 113 | 63 | 21 | 73 | 68 | 443 | 0 | 95 | 284 | 354 | 445 | 2,510 |
| 1997 | 0 | 182 | 137 | 24 | 208 | 179 | 0 | 0 | 24 | 226 | 636 | 708 | 2,324 |
| 1998 | 0 | 113 | 42 | 0 | 157 | 42 | 0 | 17 | 144 | 179 | 173 | 101 | 968 |
| 1999 | 0 | 77 | 82 | 0 | 94 | 152 | 0 | 24 | 0 | 207 | 489 | 630 | 1,755 |
| 2000 | 91 | 48 | 61 | 12 | 189 | 36 | 0 | 0 | 7 | 197 | 265 | 615 | 1,521 |

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Table 59.–Page 2 of 2.

| Year | Willow Creek | Little Willow | Kashwitna River | Caswell Creek | Sheep Creek | Goose Creek | Montana Creek | Birch Creek | Sunshine Creek | Talkeetna River ^a | Other streams ^b | Other lakes | Total |
|-----------|--------------|---------------|-----------------|---------------|-------------|-------------|---------------|-------------|----------------|------------------------------|----------------------------|-------------|-------|
| 2001 | 119 | 42 | 22 | 42 | 131 | 77 | 0 | 0 | 8 | 92 | 315 | 264 | 1,112 |
| 2002 | 209 | 54 | 37 | 0 | 248 | 58 | 0 | 0 | 0 | 90 | 150 | 905 | 1,751 |
| 2003 | 61 | 65 | 194 | 31 | 163 | 54 | 0 | 0 | 0 | 299 | 305 | 1409 | 2,581 |
| 2004 | 144 | 23 | 0 | 0 | 58 | 70 | 0 | 47 | 0 | 157 | 259 | 1166 | 1,924 |
| 2005 | 32 | 64 | 11 | 0 | 51 | 22 | 0 | 0 | 0 | 61 | 101 | 451 | 793 |
| 2006 | 103 | 94 | 73 | 22 | 52 | 34 | 0 | 12 | 0 | 125 | 43 | 1032 | 1,590 |
| 2007 | 10 | 71 | 0 | 0 | 157 | 0 | 0 | 0 | 0 | 186 | 216 | 200 | 840 |
| 2008 | 60 | 210 | 61 | 0 | 79 | 138 | 0 | 0 | 178 | 511 | 31 | 253 | 1,521 |
| 2009 | 62 | 96 | 0 | 0 | 0 | 18 | 0 | 0 | 13 | 34 | 167 | 366 | 756 |
| 2010 | 84 | 135 | 9 | 20 | 288 | 239 | 0 | 0 | 0 | 85 | 97 | 869 | 1,826 |
| 2011 | 0 | 0 | 101 | 202 | 88 | 0 | 0 | 0 | 0 | 154 | 102 | 411 | 1,058 |
| 2012 | 0 | 0 | 0 | 0 | 21 | 38 | 0 | 50 | 50 | 78 | 53 | 333 | 623 |
| Average | | | | | | | | | | | | | |
| 2008–2012 | 41 | 88 | 34 | 44 | 95 | 87 | 0 | 10 | 48 | 172 | 90 | 446 | 1,157 |
| 2013 | 0 | 41 | 0 | 0 | 69 | 123 | 0 | 0 | 0 | 208 | 122 | 685 | 1,248 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015).

Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

^a Talkeetna River and tributaries including Clear Creek.

^b Includes lakes and streams, 1977–1982.

Table 60.—Eastside Susitna River drainage rainbow trout catch by fishery, 1990–2013.

| Year | Willow Creek | Little Willow | Kashwitna River | Caswell Creek | Sheep Creek | Goose Creek | Montana Creek | Birch Creek | Sunshine Creek | Talkeetna River ^a | Other streams | Other lakes | Total |
|-----------|--------------|---------------|-----------------|---------------|-------------|-------------|---------------|-------------|----------------|------------------------------|---------------|-------------|--------|
| 1990 | 3,914 | 689 | 1,630 | 689 | 840 | 1,378 | 1,277 | | 622 | 4,788 | 3,913 | 2,066 | 21,806 |
| 1991 | 3,965 | 1,230 | 692 | 446 | 1,076 | 2,183 | 2,136 | 307 | 154 | 5,072 | 6,347 | 2,721 | 26,329 |
| 1992 | 3,206 | 1,124 | 293 | 142 | 633 | 617 | 2,501 | 40 | 103 | 5,581 | 2,754 | 2,921 | 19,915 |
| 1993 | 3,934 | 829 | 995 | 217 | 967 | 2,054 | 2,034 | 49 | 407 | 5,685 | 4,441 | 2,628 | 24,240 |
| 1994 | 4,673 | 2,024 | 319 | 172 | 757 | 1,566 | 1,807 | 56 | 56 | 4,687 | 2,838 | 4,664 | 23,619 |
| 1995 | 2,340 | 730 | 178 | 127 | 506 | 280 | 1,245 | 47 | 150 | 3,510 | 3,078 | 3,172 | 15,363 |
| 1996 | 4,766 | 1,077 | 654 | 21 | 2,077 | 384 | 2,828 | 0 | 179 | 6,790 | 3,049 | 2,983 | 24,808 |
| 1997 | 5,198 | 1,415 | 2,177 | 60 | 2,008 | 2,139 | 3,473 | 179 | 60 | 7,040 | 5,355 | 5,638 | 34,742 |
| 1998 | 4,487 | 1,259 | 1,593 | 93 | 4,885 | 333 | 4,138 | 135 | 186 | 4,560 | 2,492 | 2,080 | 26,241 |
| 1999 | 11,965 | 2,484 | 1,016 | 72 | 1,415 | 960 | 5,337 | 140 | 465 | 7,402 | 5,188 | 3,309 | 39,753 |
| 2000 | 8,836 | 1,920 | 2,107 | 145 | 2,173 | 3,175 | 7,236 | 569 | 132 | 6,669 | 3,740 | 5,901 | 42,603 |
| 2001 | 11,510 | 1,414 | 882 | 184 | 763 | 1,103 | 5,678 | 123 | 17 | 5,937 | 2,844 | 2,449 | 32,904 |
| 2002 | 22,650 | 2,821 | 1,402 | 105 | 9,308 | 4,063 | 19,170 | 45 | 66 | 11,312 | 5,164 | 4,084 | 80,190 |
| 2003 | 13,750 | 3,576 | 2,315 | 344 | 5,289 | 1,691 | 12,393 | 54 | 97 | 7,875 | 5,191 | 6,865 | 59,440 |
| 2004 | 10,920 | 2,293 | 698 | 58 | 1,869 | 1,835 | 10,171 | 540 | 351 | 6,384 | 6,961 | 4,050 | 46,130 |
| 2005 | 10,863 | 2,878 | 961 | 11 | 2,218 | 685 | 6,151 | 133 | 183 | 6,772 | 1,759 | 3,574 | 36,188 |
| 2006 | 10,032 | 1,744 | 993 | 46 | 2,716 | 1,121 | 7,610 | 60 | 24 | 7,653 | 4,997 | 1,866 | 38,862 |
| 2007 | 20,905 | 2,800 | 163 | 191 | 4,244 | 506 | 16,740 | 0 | 12 | 8,766 | 9,005 | 745 | 64,077 |
| 2008 | 8,235 | 2,597 | 1,068 | 78 | 1,769 | 746 | 8,014 | 909 | 632 | 7,889 | 3,649 | 1,212 | 36,798 |
| 2009 | 14,700 | 1,707 | 558 | 269 | 1,137 | 237 | 6,474 | 26 | 30 | 6,482 | 4,156 | 1,713 | 37,489 |
| 2010 | 10,689 | 2,260 | 24 | 20 | 5,495 | 1,567 | 6,409 | 0 | 14 | 5,266 | 4,746 | 3,468 | 39,958 |
| 2011 | 19,557 | 1,109 | 729 | 1,242 | 5,709 | 976 | 9,836 | 91 | 53 | 6,769 | 8,125 | 3,523 | 57,719 |
| 2012 | 8,207 | 602 | 326 | 50 | 870 | 1,061 | 8,590 | 210 | 441 | 3,730 | 2,749 | 610 | 27,446 |
| Average | | | | | | | | | | | | | |
| 2008–2012 | 12,278 | 1,655 | 541 | 332 | 2,996 | 917 | 7,865 | 247 | 234 | 6,027 | 4,685 | 2,105 | 39,882 |
| 2013 | 8,973 | 1,109 | 103 | 0 | 459 | 2,618 | 17,636 | 78 | 116 | 7,379 | 3,641 | 1,917 | 44,029 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>^a Talkeetna River and tributaries including Clear Creek.

Table 61.—Westside Susitna River drainage rainbow trout harvest by fishery, 1977–2013.

| Year | Alexander Creek | Deshka River | Rabideux Creek | Yentna River | Peters Creek | Lake Creek | Fish Creek ^a | Judd Lake | Other streams ^b | Other lakes ^b | Total |
|------|--------------------|-----------------|-------------------|-----------------|-----------------|---------------|----------------------------|--------------|-------------------------------|--------------------------|--------|
| 1977 | 1,251 | 1,556 | | | | 1,853 | | 68 | 1,677 | 1,067 | 7,472 |
| 1978 | 2,640 | 3,634 | | | | 2,721 | | 0 | 1,528 | 1,772 | 12,295 |
| 1979 | 1,182 | 3,182 | | | | 4,527 | | 100 | 2,709 | 855 | 12,555 |
| 1980 | 1,945 | 4,305 | | | | 2,144 | | 86 | 2,101 | 2,204 | 12,785 |
| 1981 | 2,290 | 3,631 | | | | 2,874 | | | 872 | 1,629 | 11,296 |
| 1982 | 2,505 | 3,804 | | | | 3,134 | | | 597 | 1,425 | 11,465 |
| 1983 | 608 | 2,434 | | | | 2,287 | | 0 | 2,917 | 1,007 | 9,253 |
| 1984 | 785 | 2,120 | | | 611 | 3,080 | | 0 | 1,084 | 399 | 8,079 |
| 1985 | 1,318 | 3,104 | | | | 1,439 | | | 1,387 | 866 | 8,114 |
| 1986 | 1,553 | 3,038 | | | | 961 | 45 | 0 | 614 | 457 | 6,668 |
| 1987 | 978 | 3,006 | | | | 1,902 | 398 | 0 | 1,357 | 379 | 8,020 |
| 1988 | 1,419 | 4,075 | | | 73 | 1,146 | 109 | 18 | 672 | 546 | 8,058 |
| 1989 | 486 | 1,676 | 0 | 38 | 162 | 676 | 428 | 105 | 576 | 781 | 4,928 |
| 1990 | 640 | 707 | 17 | 0 | 303 | 808 | 135 | | 810 | 540 | 3,960 |
| 1991 | 917 | 1,275 | 0 | 140 | 295 | 498 | 358 | 0 | 810 | 233 | 4,526 |
| 1992 | 198 | 459 | 24 | 127 | 214 | 214 | 79 | | 349 | 364 | 2,028 |
| 1993 | 128 | 452 | | 36 | 49 | 184 | 172 | | 1,163 | 297 | 2,481 |
| 1994 | 207 | 415 | | 123 | 146 | 714 | 93 | | 613 | 215 | 2,526 |
| 1995 | 86 | 183 | | 140 | 46 | 565 | 360 | | 588 | 89 | 2,057 |
| 1996 | 95 | 321 | | 146 | 227 | 616 | 51 | | 468 | | 1,924 |
| 1997 | 0 | 264 | | 0 | 80 | 436 | 56 | | 616 | | 1,452 |
| 1998 | 0 | 218 | | 0 | | 285 | 124 | | 454 | | 1,081 |
| 1999 | 0 | 561 | | 59 | 70 | 640 | 168 | | 368 | | 1,866 |
| 2000 | 0 | 205 | | 151 | 71 | 567 | 85 | | 147 | 0 | 1,226 |

-continued-

Table 61.–Page 2 of 2.

| Year | Alexander Creek | Deshka River | Rabideux Creek | Yentna River | Peters Creek | Lake Creek | Fish Creek ^a | Judd Lake | Other streams ^b | Other lakes ^b | Total |
|-----------|--------------------|-----------------|-------------------|-----------------|-----------------|---------------|----------------------------|--------------|-------------------------------|--------------------------|-------|
| 2001 | 0 | 270 | | 156 | 56 | 183 | 33 | | 20 | 41 | 759 |
| 2002 | 13 | 417 | | 0 | 29 | 445 | 119 | | 186 | 0 | 1,209 |
| 2003 | 0 | 368 | | 154 | 48 | 561 | 77 | | 217 | 0 | 1,425 |
| 2004 | 0 | 938 | | 0 | 23 | 587 | 27 | | 54 | 0 | 1,629 |
| 2005 | 0 | 60 | | 52 | 11 | 209 | 0 | | 7 | 0 | 339 |
| 2006 | 0 | 523 | | 96 | 39 | 159 | 198 | 0 | 0 | 12 | 1,027 |
| 2007 | 0 | 185 | 29 | 52 | 117 | 236 | 0 | 0 | 0 | 0 | 619 |
| 2008 | 0 | 419 | 0 | 134 | 10 | 153 | 13 | 0 | 0 | 15 | 744 |
| 2009 | 0 | 562 | 0 | 86 | 122 | 27 | 0 | 0 | 43 | 25 | 865 |
| 2010 | 0 | 122 | 0 | 57 | 0 | 154 | 0 | 0 | 0 | 101 | 434 |
| 2011 | 0 | 0 | 20 | 119 | 27 | 143 | 0 | 26 | 72 | 107 | 514 |
| 2012 | 0 | 61 | 11 | 0 | 0 | 76 | 0 | 0 | 31 | 0 | 179 |
| Average | | | | | | | | | | | |
| 2008–2012 | 0 | 233 | | 79 | 32 | 111 | 3 | | 29 | 50 | 547 |
| 2013 | 0 | 103 | 0 | 0 | 0 | 174 | 0 | 0 | 191 | 0 | 468 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015).

Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

^a Fish Lake drainage (Yentna River drainage).

^b May include harvest from West Cook Inlet waters through 1995.

Table 62.—Westside Susitna River drainage rainbow trout catch by fishery, 1990–2013.

| Year | Alexander Creek | Deshka River | Rabideux Creek | Yentna River | Peters Creek | Lake Creek | Fish Creek ^a | Talachulitna River | Other streams ^b | Other lakes ^b | Total |
|-----------|--------------------|-----------------|-------------------|-----------------|-----------------|---------------|----------------------------|-----------------------|-------------------------------|-----------------------------|--------|
| 1990 | 3,065 | 6,197 | 34 | 135 | 1,532 | 8,757 | 707 | 10,761 | 2,474 | 1,431 | 35,093 |
| 1991 | 2,301 | 5,303 | 16 | 295 | 1,182 | 12,969 | 1,415 | 18,489 | 2,863 | 2,037 | 46,870 |
| 1992 | 1,124 | 3,396 | 142 | 214 | 633 | 5,399 | 768 | 7,892 | 2,123 | 1,930 | 23,621 |
| 1993 | 992 | 5,772 | | 101 | 331 | 9,232 | 647 | 8,824 | 3,329 | 683 | 29,911 |
| 1994 | 1,075 | 3,345 | | 201 | 646 | 10,387 | 740 | 6,646 | 1,536 | 763 | 25,339 |
| 1995 | 472 | 2,288 | | 1,638 | 644 | 5,546 | 596 | 6,286 | 3,499 | 2,463 | 23,432 |
| 1996 | 195 | 4,166 | | 507 | 709 | 7,655 | 572 | 16,488 | 3,311 | | 33,603 |
| 1997 | 1,034 | 2,355 | | 232 | 331 | 9,378 | 1,379 | 12,535 | 2,973 | | 30,217 |
| 1998 | 490 | 1,594 | | 846 | | 6,668 | 641 | 4,336 | 2,795 | | 17,370 |
| 1999 | 643 | 5,323 | | 446 | 152 | 15,310 | 2,144 | 11,072 | 2,774 | | 37,864 |
| 2000 | 759 | 6,146 | | 1,774 | 1,435 | 12,156 | 833 | 5,209 | 1,086 | | 29,398 |
| 2001 | 1,335 | 8,300 | | 1,879 | 375 | 7,739 | 1,335 | 7,027 | 727 | 75 | 28,792 |
| 2002 | 728 | 4,464 | | 518 | 1,954 | 11,622 | 679 | 6,283 | 3,497 | 0 | 29,745 |
| 2003 | 313 | 5,868 | | 768 | 510 | 22,460 | 176 | 9,721 | 511 | 0 | 40,327 |
| 2004 | 220 | 5,868 | | 1,514 | 381 | 22,130 | 2,411 | 9,000 | 150 | 1,295 | 42,969 |
| 2005 | 64 | 3,161 | | 2,521 | 838 | 21,197 | 260 | 17,060 | 1,433 | 41 | 46,575 |
| 2006 | 402 | 9,635 | | 1,752 | 195 | 28,013 | 395 | 2,883 | 707 | 36 | 44,018 |
| 2007 | 106 | 3,905 | 58 | 3,728 | 663 | 11,405 | 173 | 11,846 | 152 | 0 | 32,036 |
| 2008 | 0 | 2,070 | 0 | 1,974 | 268 | 10,267 | 624 | 2,249 | 580 | 31 | 18,063 |
| 2009 | 34 | 3,093 | 0 | 2,723 | 812 | 10,217 | 479 | 6,331 | 3,766 | 0 | 27,455 |
| 2010 | 0 | 1,334 | 0 | 1,886 | 326 | 10,011 | 122 | 5,242 | 734 | 1,130 | 20,785 |
| 2011 | 43 | 2,156 | 101 | 1,376 | 53 | 23,420 | 0 | 8,647 | 2,520 | 852 | 39,168 |
| 2012 | 0 | 556 | 24 | 1,238 | 0 | 12,321 | 204 | 7,109 | 3,249 | 17 | 24,718 |
| Average | | | | | | | | | | | |
| 2008–2012 | 15 | 1,842 | | 1,839 | 292 | 13,247 | 286 | 5,916 | 2,170 | 406 | 26,038 |
| 2013 | 123 | 731 | 0 | 794 | 449 | 9,015 | 52 | 5,433 | 2,408 | 1,173 | 20,178 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015).

Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

^a Fish Lake drainage (Yentna River drainage).

^b May include harvest from West Cook Inlet waters through 1995.

Table 63.–Knik Arm drainage rainbow trout harvest for Little Susitna River, Knik River, Wasilla Creek, Cottonwood Creek, Big Lake, Wasilla Lake, Finger Lake, Kepler Lake complex, and Lucille Lake drainages, 1977–2013.

| Year | Little Susitna | Knik River ^a | Wasilla Creek | Cottonwood Ck | Big Lake ^b | Wasilla Lake | Finger Lake | Kepler L. complex | Big Lake | Lucille Lake |
|-----------|----------------|-------------------------|---------------|---------------|-----------------------|--------------|-------------|-------------------|----------|--------------|
| 1977 | 843 | | 252 | | | | 0 | 1,822 | 3,906 | 0 |
| 1978 | 886 | | 45 | | | | 0 | 5,180 | 4,845 | 0 |
| 1979 | 1,391 | | 500 | 1,736 | | 2,782 | 0 | 3,372 | 2,882 | 0 |
| 1980 | 852 | | 121 | 1,085 | | 2,084 | 0 | 5,906 | 5,398 | 0 |
| 1981 | 2,692 | 0 | 38 | 824 | | 2,261 | 0 | 8,200 | 9,810 | 0 |
| 1982 | 1,551 | 0 | 63 | 786 | | 2,243 | 0 | 7,325 | 9,369 | 0 |
| 1983 | 1,290 | 0 | 84 | 556 | | 1,804 | 0 | 3,986 | 4,102 | 0 |
| 1984 | 860 | 549 | 312 | 748 | | 848 | 0 | 9,128 | 4,938 | 0 |
| 1985 | 1,294 | 780 | 260 | 590 | 347 | 1,231 | 3,381 | 14,011 | 6,953 | 35 |
| 1986 | 1,407 | 235 | 11 | 145 | 391 | 1,653 | 3,172 | 7,249 | 5,105 | 168 |
| 1987 | 447 | 58 | 126 | 301 | 204 | 680 | 2,476 | 7,758 | 2,476 | 3,379 |
| 1988 | 1,273 | 382 | 582 | 782 | 309 | 891 | 5,421 | 16,462 | 4,220 | 8,495 |
| 1989 | 599 | 0 | 91 | 163 | 1,063 | 972 | 2,788 | 18,233 | 5,402 | 972 |
| 1990 | 673 | 0 | 131 | 410 | 361 | 443 | 2,544 | 10,223 | 3,282 | 246 |
| 1991 | 781 | 0 | 28 | 628 | 209 | 1,953 | 2,539 | 8,496 | 4,883 | 600 |
| 1992 | 720 | 0 | 24 | 404 | 791 | 483 | 1,860 | 6,839 | 2,090 | 309 |
| 1993 | 186 | 0 | 30 | 475 | 228 | 630 | 2,037 | 2,930 | 2,073 | 424 |
| 1994 | 300 | 0 | 135 | 425 | 393 | 735 | 2,666 | 3,551 | 2,260 | 156 |
| 1995 | 326 | 0 | 37 | 413 | 150 | 390 | 1,887 | 2,648 | 1,371 | 249 |
| 1996 | 121 | 0 | 40 | 248 | 74 | 1,735 | 2,316 | 5,092 | 2,260 | |
| 1997 | 348 | 0 | 29 | 215 | 321 | 475 | 3,720 | 8,407 | 2,083 | 335 |
| 1998 | 59 | 0 | 0 | 390 | 412 | 483 | 1,804 | 3,167 | 1,358 | 214 |
| 1999 | 253 | 0 | 0 | 93 | 2,114 | 762 | 3,301 | 5,391 | 1,501 | |
| 2000 | 252 | 0 | | 218 | 355 | 1,037 | 3,511 | 7,469 | 1,475 | 116 |
| 2001 | 253 | 0 | | 613 | 182 | 305 | 1,534 | 4,197 | 905 | 1,107 |
| 2002 | 154 | 0 | 0 | 290 | 236 | 329 | 5,608 | 3,498 | 1,521 | 989 |
| 2003 | 140 | 0 | 0 | 32 | 11 | 511 | 1,326 | 3,625 | 884 | 1,194 |
| 2004 | 93 | 82 | 0 | 290 | 23 | 264 | 1,527 | 4,423 | 626 | 842 |
| 2005 | 51 | 22 | 88 | 44 | 0 | 535 | 1,358 | 3,657 | 752 | 391 |
| 2006 | 166 | 0 | 0 | 115 | 15 | 115 | 1,566 | 2,419 | 1,005 | 996 |
| 2007 | 197 | 0 | 0 | 802 | 11 | 131 | 573 | 1,903 | 332 | 79 |
| 2008 | 147 | 0 | 19 | 199 | 53 | 628 | 2,156 | 3,696 | 785 | 64 |
| 2009 | 79 | 0 | 52 | 9 | 30 | 89 | 893 | 2,497 | 299 | 148 |
| 2010 | 203 | 0 | 0 | 88 | 117 | 95 | 1,520 | 1,916 | 551 | 0 |
| 2011 | 13 | 24 | 0 | 61 | 0 | 289 | 2,095 | 1,637 | 887 | 101 |
| 2012 | 33 | 0 | 0 | 0 | 0 | 140 | 821 | 973 | 492 | 175 |
| Average | | | | | | | | | | |
| 2008–2012 | 95 | 5 | 14 | 71 | 40 | 248 | 1,497 | 2,144 | 603 | 98 |
| 2013 | 101 | 0 | 0 | 0 | 0 | 82 | 1,665 | 2,698 | 488 | 0 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

^a Knik River tributaries include Jim Creek.

^b Big Lake drainage streams.

Table 64.—Knik Arm drainage rainbow trout harvest for Kalmbach Lake, Carpenter Lake, Knik Lake, Memory Lake, Seymour Lake, Bonnie Lakes, Nancy Lake complex, and other lakes and streams, and total KAMU harvest; 1977–2013.

| Year | Kalmbach Lake | Carpenter Lake | Knik Lake | Memory Lake | Seymour Lake | Bonnie Lakes | Nancy L. complex | Other streams ^a | Other lakes | Knik Arm total |
|-----------|---------------|----------------|-----------|-------------|--------------|--------------|------------------|----------------------------|-------------|----------------|
| 1977 | | | | | | | 2,642 | 9,150 | | 18,615 |
| 1978 | | | | | | | 1,853 | 10,330 | | 23,139 |
| 1979 | | | | | | | 2,909 | 9,271 | | 24,843 |
| 1980 | | | | | | | 2,540 | 11,382 | | 29,368 |
| 1981 | | | | | | | 4,723 | 13,201 | | 41,749 |
| 1982 | | | | | | | 2,840 | 6,372 | | 30,549 |
| 1983 | | | | | | | 4,846 | 1,490 | 8,263 | 26,421 |
| 1984 | | | | 382 | | | 1,771 | 1,247 | 5,635 | 26,418 |
| 1985 | | | | | | | 2,514 | 1,197 | 13,838 | 46,431 |
| 1986 | | | | | 726 | 736 | 2,200 | 815 | 3,677 | 27,690 |
| 1987 | | | | | | | 2,728 | 427 | 3,603 | 24,663 |
| 1988 | | | | | | 910 | 5,439 | 964 | 12,479 | 58,609 |
| 1989 | 1,625 | | 872 | 590 | 445 | 945 | 3,696 | 117 | 5,945 | 44,518 |
| 1990 | | | | | | 738 | 2,182 | 1,131 | 8,335 | 30,699 |
| 1991 | | | 600 | 1,046 | | 363 | 2,818 | 545 | 14,147 | 39,636 |
| 1992 | 610 | 1,116 | 887 | 364 | 459 | 1,045 | 2,945 | 8 | 7,041 | 27,995 |
| 1993 | | | | 890 | 734 | 399 | 2,116 | 248 | 8,165 | 21,565 |
| 1994 | | | | 323 | 570 | 1,184 | 1,300 | 56 | 8,392 | 22,446 |
| 1995 | 543 | 393 | | 395 | | 365 | 785 | 119 | 4,797 | 14,878 |
| 1996 | 221 | | | 53 | | | 753 | 189 | 8,678 | 21,780 |
| 1997 | | | | 406 | | 520 | 963 | 72 | 7,806 | 25,695 |
| 1998 | | | 984 | | | | 321 | 42 | 8,459 | 17,693 |
| 1999 | | | 713 | | | 572 | 611 | 81 | 9,135 | 24,527 |
| 2000 | | | 1,569 | | | 223 | 1,900 | 84 | 10,536 | 28,745 |
| 2001 | 92 | 42 | 634 | 604 | 117 | 81 | 1,349 | 25 | 9,021 | 21,061 |
| 2002 | 359 | 29 | 907 | 408 | 17 | 223 | 916 | 535 | 12,306 | 28,325 |
| 2003 | 98 | 230 | 786 | 247 | 224 | 107 | 1,601 | 0 | 6,601 | 17,617 |
| 2004 | 175 | 79 | 226 | 234 | 517 | 26 | 525 | 21 | 7,765 | 17,738 |
| 2005 | 155 | 44 | 66 | 395 | 144 | 22 | 771 | 120 | 5,752 | 14,367 |
| 2006 | 60 | 24 | 521 | 132 | 147 | 231 | 1,032 | 19 | 4,961 | 13,524 |
| 2007 | 236 | 29 | 117 | 0 | 69 | 94 | 1,078 | 53 | 4,909 | 10,613 |
| 2008 | 49 | 319 | 394 | 107 | 143 | 71 | 174 | 18 | 6,515 | 15,537 |
| 2009 | 61 | 100 | 216 | 502 | 54 | 88 | 274 | 0 | 2,590 | 7,981 |
| 2010 | 117 | 616 | 596 | 113 | 15 | 178 | 15 | 240 | 4,465 | 10,845 |
| 2011 | 0 | 0 | 385 | 290 | 81 | 61 | 40 | 56 | 3,490 | 9,510 |
| 2012 | 488 | 32 | 0 | 0 | 182 | 111 | 0 | 146 | 4,701 | 8,294 |
| Average | | | | | | | | | | |
| 2008–2012 | 143 | 213 | 318 | 202 | 95 | 102 | 101 | 92 | 4,352 | 10,433 |
| 2013 | 164 | 0 | 343 | 321 | 219 | 146 | 102 | 82 | 2,784 | 9,195 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>^a Includes lakes and streams, 1977–1982.

Table 65.—Knik Arm drainage rainbow trout catch for Little Susitna River, Knik River, Wasilla Creek, Cottonwood Creek, Big Lake, Wasilla Lake, Finger Lake, Kepler Lake complex, and Lucille Lake drainages, 1990–2013.

| Year | Little Susitna | Knik River ^a | Wasilla Creek | Cottonwood Ck | Big Lake ^b | Wasilla Lake | Finger Lake | Kepler L. complex | Big Lake | Lucille Lake |
|-----------|----------------|-------------------------|---------------|---------------|-----------------------|--------------|-------------|-------------------|----------|--------------|
| 1990 | 1,953 | 0 | 607 | 2,183 | 2,100 | 1,707 | 5,645 | 35,085 | 8,123 | 1,034 |
| 1991 | 1,507 | 0 | 28 | 795 | 614 | 2,916 | 4,576 | 18,986 | 10,588 | 670 |
| 1992 | 2,319 | 0 | 40 | 1,987 | 2,375 | 1,544 | 6,087 | 24,887 | 5,296 | 602 |
| 1993 | 1,308 | 0 | 195 | 3,987 | 1,445 | 1,497 | 7,272 | 16,151 | 4,845 | 651 |
| 1994 | 1,198 | 0 | 312 | 911 | 2,295 | 2,142 | 6,168 | 16,534 | 5,502 | 302 |
| 1995 | 1,783 | 0 | 92 | 1,015 | 412 | 1,001 | 5,792 | 16,634 | 3,565 | 514 |
| 1996 | 323 | 0 | 40 | 1,153 | 171 | 4,384 | 6,494 | 24,201 | 8,023 | |
| 1997 | 1,029 | 0 | 53 | 992 | 476 | 938 | 9,218 | 27,065 | 6,357 | 610 |
| 1998 | 319 | 0 | 94 | 1,878 | 1,276 | 1,405 | 6,789 | 16,175 | 5,298 | 1,385 |
| 1999 | 1,658 | 0 | 49 | 1,903 | 2,243 | 2,287 | 5,602 | 20,169 | 6,569 | |
| 2000 | 1,567 | | | 957 | 1,081 | 2,144 | 9,327 | 27,859 | 7,212 | 1,161 |
| 2001 | 1,794 | 0 | 58 | 3,016 | 548 | 1,499 | 4,313 | 16,349 | 4,546 | 3,616 |
| 2002 | 1,319 | 0 | 0 | 1,628 | 2,114 | 896 | 9,753 | 17,330 | 4,601 | 6,193 |
| 2003 | 1,568 | 0 | 130 | 1,727 | 206 | 2,230 | 5,217 | 16,575 | 5,614 | 4,842 |
| 2004 | 1,368 | 1,414 | 0 | 726 | 1,239 | 1,720 | 5,030 | 19,991 | 3,253 | 2,330 |
| 2005 | 772 | 259 | 221 | 628 | 33 | 1,468 | 4,833 | 13,823 | 5,937 | 1,727 |
| 2006 | 1,583 | 944 | 0 | 1,500 | 159 | 224 | 5,221 | 12,348 | 2,975 | 2,896 |
| 2007 | 995 | 0 | 94 | 3,612 | 213 | 657 | 1,851 | 9,737 | 3,039 | 695 |
| 2008 | 792 | 0 | 187 | 885 | 53 | 2,319 | 6,631 | 16,838 | 5,381 | 755 |
| 2009 | 644 | 34 | 496 | 255 | 245 | 774 | 4,867 | 14,712 | 2,963 | 777 |
| 2010 | 1,071 | 118 | 29 | 440 | 2,292 | 271 | 3,774 | 10,736 | 2,699 | 498 |
| 2011 | 352 | 35 | 101 | 162 | 20 | 353 | 5,444 | 13,609 | 5,278 | 455 |
| 2012 | 288 | 0 | 13 | 33 | 338 | 353 | 3,611 | 5,902 | 1,858 | 576 |
| Average | | | | | | | | | | |
| 2008–2012 | 629 | 37 | 165 | 355 | 590 | 814 | 4,865 | 12,359 | 3,636 | 612 |
| 2013 | 253 | 0 | 0 | 330 | 20 | 475 | 8,129 | 18,190 | 4,033 | 1,038 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

^a Knik River and tributaries including Jim Creek.

^b Big Lake drainage streams.

Table 66.—Knik Arm drainage rainbow trout harvest for Kalmbach Lake, Carpenter Lake, Knik Lake, Memory Lake, Seymour Lake, Bonnie Lakes, Nancy Lake complex, and other lakes and streams, and total KAMU harvest; 1990–2013.

| Year | Kalmbach Lake | Carpenter Lake | Knik Lake | Memory Lake | Seymour Lake | Bonnie Lakes | Nancy L. complex | Other streams | Other lakes | Total |
|-----------|---------------|----------------|-----------|-------------|--------------|--------------|------------------|---------------|-------------|---------|
| 1990 | | | | | | 2,133 | 7,466 | 5,448 | 25,236 | 98,720 |
| 1991 | | | 2,246 | 1,576 | | 893 | 6,348 | 2,371 | 34,531 | 88,645 |
| 1992 | 3,103 | 1,868 | 1,504 | 1,314 | 712 | 3,309 | 7,765 | 64 | 20,555 | 85,331 |
| 1993 | | | | 1,523 | 1,224 | 2,356 | 5,130 | 367 | 21,684 | 69,635 |
| 1994 | | | | 1,230 | 1,413 | 2,657 | 4,372 | 282 | 24,932 | 70,255 |
| 1995 | 1,067 | 824 | | 863 | | 1,331 | 2,344 | 209 | 18,662 | 56,108 |
| 1996 | 252 | | | 727 | | | 1,966 | 409 | 32,614 | 80,757 |
| 1997 | | | | 968 | | 1,253 | 3,098 | 359 | 32,862 | 85,278 |
| 1998 | | 3,324 | 3,324 | | | | 1,173 | 151 | 27,570 | 66,837 |
| 1999 | | | 1,746 | | | 1,658 | 3,538 | 421 | 36,848 | 84,691 |
| 2000 | | | 4,163 | | | 1,834 | 7,273 | 443 | 48,992 | 114,013 |
| 2001 | 215 | 1,040 | 1,447 | 2,098 | 175 | 328 | 3,874 | 351 | 25,554 | 70,821 |
| 2002 | 755 | 87 | 2,037 | 1,804 | 268 | 586 | 4,361 | 934 | 38,854 | 93,520 |
| 2003 | 455 | 1,685 | 1,698 | 343 | 1,989 | 311 | 3,767 | 86 | 19,769 | 68,212 |
| 2004 | 1,554 | 79 | 862 | 1,531 | 587 | 119 | 4,184 | 106 | 24,804 | 70,897 |
| 2005 | 464 | 376 | 0 | 1,828 | 199 | 508 | 1,994 | 485 | 24,315 | 59,870 |
| 2006 | 360 | 271 | 576 | 827 | 202 | 709 | 2,828 | 62 | 14,379 | 48,064 |
| 2007 | 870 | 190 | 204 | 278 | 748 | 709 | 2,371 | 154 | 14,325 | 40,742 |
| 2008 | 637 | 810 | 2,002 | 145 | 933 | 1,123 | 8,530 | 935 | 18,629 | 67,585 |
| 2009 | 249 | 118 | 277 | 1,687 | 274 | 407 | 1,711 | 52 | 9,441 | 39,983 |
| 2010 | 323 | 821 | 882 | 158 | 69 | 1,046 | 695 | 189 | 16,156 | 42,267 |
| 2011 | 89 | 223 | 1,174 | 411 | 613 | 202 | 73 | 283 | 10,650 | 39,527 |
| 2012 | 803 | 49 | 0 | 0 | 538 | 1,090 | 283 | 347 | 13,799 | 29,881 |
| Average | | | | | | | | | | |
| 2008–2012 | 420 | 404 | 867 | 480 | 485 | 774 | 2,258 | 361 | 13,735 | 43,849 |
| 2013 | 1,297 | 0 | 596 | 1,587 | 423 | 2,462 | 676 | 82 | 12,418 | 52,009 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

Table 67.—Northern Cook Inlet Management Area sport catch and harvest of northern pike by management unit, 1977–2013.

| Year | Northern Cook Inlet Management Area ^a | | | | | | | | | | | | | |
|------|--|---------|--------------------|-------|--------------------|-------|--------------------|-------|--------------------|--------|---------------------|---------|-----------|---------|
| | Knik Arm ^b | | Eastside Susitna | | Westside Susitna | | West Cook Inlet | | Total | | Southcentral Region | | Statewide | |
| | Catch ^c | Harvest | Catch ^c | Harv. | Harv. | % NCIMA | Harvest | % NCIMA |
| 1977 | | 0 | | | | 132 | 0 | | | 132 | 321 | 41.1 | 11,982 | 1.1 |
| 1978 | | 0 | | | | 316 | 0 | | | 316 | 767 | 41.2 | 12,520 | 2.5 |
| 1979 | | 0 | | | | 382 | 0 | | | 382 | 762 | 50.1 | 12,741 | 3.0 |
| 1980 | | 0 | | | | 232 | 0 | | | 232 | 1,358 | 17.1 | 17,000 | 1.4 |
| 1981 | | 0 | | | | 125 | 0 | | | 125 | 1,411 | 8.9 | 16,536 | 0.8 |
| 1982 | | 0 | | | | 607 | 0 | | | 607 | 1,707 | 35.6 | 18,964 | 3.2 |
| 1983 | | 0 | | | | 944 | 0 | | | 944 | 2,642 | 35.7 | 21,476 | 4.4 |
| 1984 | | 0 | | | 1,821 | 0 | | | 1,821 | 4,424 | 41.2 | 18,641 | 9.8 | |
| 1985 | | 156 | | | 1,248 | 0 | | | 1,404 | 2,240 | 62.7 | 17,943 | 7.8 | |
| 1986 | | 458 | | | 1,519 | 0 | | | 1,977 | 2,894 | 68.3 | 21,890 | 9.0 | |
| 1987 | | 924 | | | 1,540 | 0 | | | 2,464 | 4,839 | 50.9 | 19,079 | 12.9 | |
| 1988 | | 364 | | | 2,818 | 291 | | | 3,473 | 3,598 | 96.5 | 23,440 | 14.8 | |
| 1989 | | 863 | | | 2,257 | 0 | | | 3,120 | 4,434 | 70.4 | 21,659 | 14.4 | |
| 1990 | 2,593 | 754 | | | 14,465 | 2,088 | 0 | | 17,058 | 2,842 | 3,655 | 77.8 | 15,985 | 17.8 |
| 1991 | 7,021 | 2,709 | | | 11,193 | 3,931 | 0 | | 18,214 | 6,640 | 8,704 | 76.3 | 29,611 | 22.4 |
| 1992 | 7,097 | 2,605 | | | 13,828 | 2,777 | 0 | | 20,925 | 5,382 | 7,314 | 73.6 | 18,616 | 28.9 |
| 1993 | 10,141 | 2,102 | 0 | 0 | 24,077 | 3,619 | 19 | 0 | 34,237 | 5,721 | 7,131 | 80.2 | 19,366 | 29.5 |
| 1994 | 2,816 | 1,328 | 0 | 0 | 5,436 | 2,556 | 18 | 9 | 7,757 | 3,893 | 5,800 | 67.1 | 25,558 | 15.2 |
| 1995 | 825 | 522 | 0 | 0 | 15,414 | 3,024 | 0 | 0 | 15,465 | 3,546 | 5,323 | 66.6 | 19,006 | 18.7 |
| 1996 | 12,220 | 4,021 | 368 | 11 | 17,657 | 3,902 | 0 | 0 | 18,025 | 7,934 | 10,503 | 75.5 | 23,043 | 34.4 |
| 1997 | 9,137 | 4,858 | 795 | 95 | 16,266 | 4,026 | 75 | 45 | 17,136 | 9,024 | 10,489 | 86.0 | 16,603 | 54.4 |
| 1998 | 10,223 | 4,272 | 130 | 130 | 17,928 | 3,753 | 321 | 25 | 22,124 | 8,180 | 9,595 | 85.3 | 15,617 | 52.4 |
| 1999 | 14,231 | 6,785 | 441 | 260 | 14,348 | 3,686 | 334 | 93 | 17,845 | 10,824 | 13,327 | 81.2 | 19,766 | 54.8 |
| 2000 | 16,717 | 5,698 | 308 | 101 | 27,381 | 3,692 | 234 | 86 | 34,054 | 9,577 | 12,019 | 79.7 | 18,062 | 53.0 |
| 2001 | 15,457 | 6,544 | 776 | 55 | 25,147 | 5,479 | 1,042 | 661 | 28,539 | 12,739 | 16,673 | 76.4 | 23,623 | 53.9 |
| 2002 | 13,079 | 5,716 | 647 | 618 | 18,450 | 5,865 | 284 | 119 | 19,381 | 12,318 | 14,862 | 82.9 | 22,567 | 54.6 |
| 2003 | 14,094 | 4,026 | 11 | 0 | 14,818 | 3,816 | 355 | 182 | 16,762 | 8,024 | 11,282 | 71.1 | 17,388 | 46.1 |
| 2004 | 11,179 | 4,961 | 119 | 91 | 21,878 | 6,626 | 704 | 493 | 22,769 | 12,171 | 17,122 | 71.1 | 28,799 | 42.3 |
| 2005 | 11,347 | 6,160 | 513 | 104 | 25,704 | 4,889 | 330 | 153 | 26,547 | 11,306 | 13,802 | 81.9 | 24,819 | 45.6 |

-continued-

Table 67.–Page 2 of 2.

| Northern Cook Inlet Management Area ^a | | | | | | | | | | | | | | |
|--|-----------------------|-------|--------------------|-------|--------------------|-------|--------------------|-------|--------------------|--------|---------------------|------------|-----------|------------|
| | Knik Arm ^b | | Eastside Susitna | | Westside Susitna | | West Cook Inlet | | Total | | Southcentral Region | | Statewide | |
| Year | Catch ^c | Harv. | Catch ^c | Harv. | Catch ^c | Harv. | Catch ^c | Harv. | Catch ^c | Harv. | Harv. | % NCIMA | Harvest | % NCIMA |
| 2006 | 14,754 | 6,664 | 312 | 137 | 15,685 | 4,318 | 799 | 285 | 16,867 | 11,404 | 13,261 | 86.0 | 18,184 | 62.7 |
| 2007 | 6,013 | 3,050 | 2,833 | 1,355 | 12,640 | 3,526 | 225 | 225 | 15,822 | 8,156 | 11,062 | 73.7 | 17,174 | 47.5 |
| 2008 | 3,612 | 1,752 | 4,750 | 468 | 15,776 | 5,683 | 229 | 96 | 20,755 | 7,999 | 9,270 | 86.3 | 12,959 | 61.7 |
| 2009 | 10,213 | 4,647 | 1,318 | 385 | 14,389 | 3,368 | 1,983 | 88 | 17,690 | 8,488 | 12,919 | 65.7 | 18,763 | 45.2 |
| 2010 | 6,031 | 3,372 | 6,935 | 1,033 | 15,826 | 5,283 | 765 | 225 | 23,526 | 9,913 | 11,093 | 89.4 | 16,353 | 60.6 |
| 2011 | 7,930 | 5,963 | 3,508 | 2,138 | 3,787 | 2,969 | 37 | 19 | 7,332 | 11,089 | 11,093 | 100.0 | 16,353 | 67.8 |
| 2012 | 5,742 | 3,231 | 3,959 | 79 | 9,686 | 4,505 | 0 | 0 | 13,645 | 7,815 | 8,580 | 91.1 | 12,999 | 60.1 |
| Average | | | | | | | | | | | | | | |
| 1977–2012 | 9,238 | 2,625 | 1,386 | 353 | 16,164 | 2,981 | 388 | 86 | 19,673 | 5,888 | 7,674 | 67.9 | 19,030 | 31.0 |
| 2008–2012 | 6,706 | 3,793 | 4,094 | 821 | 11,893 | 4,362 | 603 | 86 | 16,590 | 9,061 | 10,591 | 86.5 | 15,485 | 59.1 |
| 2013 | 11,182 | 9,338 | 1,630 | 1,223 | 19,753 | 8,168 | 243 | 35 | 21,626 | 18,764 | 24,778 | 75.7 | 29,218 | 64.2 |

Source: (Alaska Sport Fishing Survey database [Internet]. 1996– . Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish. Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>)

^a Prior to 1985 , SWHS harvest estimates for northern pike in the Knik Arm drainage area may have been included in the “other” (fish Species) Category.

^b No reported catch or harvest from Eastside Susitna or West Cook Inlet management units prior to 1993.

Table 68.—Knik Arm drainage northern pike catch by fishery, 1990–2013.

| Year | Little Susitna | Knik River ^a | Figure 8 Lake | Cottonwood Creek | Big Lake ^b | Flathorn Lake | Nancy Lake ^c | Other ^d | Total |
|-----------|----------------|-------------------------|---------------|------------------|-----------------------|---------------|-------------------------|--------------------|--------|
| 1990 | 0 | 0 | 0 | 0 | 0 | 66 | 2,314 | 213 | 2,593 |
| 1991 | 0 | 0 | 0 | 0 | 0 | 560 | 6,385 | 76 | 7,021 |
| 1992 | 0 | 0 | 0 | 0 | 0 | 948 | 5,970 | 179 | 7,097 |
| 1993 | 0 | 0 | 0 | 0 | 0 | 1,786 | 6,445 | 1,910 | 10,141 |
| 1994 | 0 | 0 | 0 | 0 | 64 | 709 | 1,846 | 197 | 2,816 |
| 1995 | 59 | 0 | 0 | 0 | 0 | 722 | 0 | 44 | 825 |
| 1996 | 0 | 0 | 0 | 0 | 13 | 3,852 | 7,210 | 1,145 | 12,220 |
| 1997 | 0 | 0 | 1,553 | 0 | 7 | 3,152 | 3,759 | 666 | 9,137 |
| 1998 | 150 | 0 | 1,002 | 0 | 202 | 4,241 | 3,761 | 867 | 10,223 |
| 1999 | 0 | 0 | 2,305 | 0 | 159 | 1,321 | 9,336 | 1,110 | 14,231 |
| 2000 | 66 | 0 | 1,946 | 0 | 667 | 3,708 | 8,685 | 1,645 | 16,717 |
| 2001 | 129 | 0 | 1,499 | 0 | 235 | 3,123 | 7,840 | 2,631 | 15,457 |
| 2002 | 76 | 0 | 4,078 | 0 | 0 | 3,869 | 991 | 4,065 | 13,079 |
| 2003 | 0 | 0 | 1,388 | 0 | 48 | 6,676 | 1,312 | 4,670 | 14,094 |
| 2004 | 150 | 0 | 3,389 | 0 | 0 | 1,740 | 5,354 | 546 | 11,179 |
| 2005 | 118 | 0 | 2,160 | 0 | 0 | 1,959 | 5,254 | 1,856 | 11,347 |
| 2006 | 0 | 0 | 3,141 | 0 | 71 | 5,744 | 5,606 | 192 | 14,754 |
| 2007 | 12 | 0 | 825 | 0 | 246 | 2,645 | 4,230 | 700 | 8,658 |
| 2008 | 0 | 0 | 724 | 0 | 98 | 4,399 | 2,572 | 218 | 8,011 |
| 2009 | 88 | 0 | 1,294 | 27 | 1,262 | 614 | 6,678 | 864 | 10,827 |
| 2010 | 0 | 0 | 677 | 0 | 249 | 6,796 | 4,968 | 137 | 12,827 |
| 2011 | 0 | 0 | 2,804 | 0 | 297 | 2,279 | 2,193 | 2,747 | 10,320 |
| 2012 | 0 | 0 | 1,525 | 0 | 20 | 3,880 | 4,102 | 95 | 9,622 |
| Average | | | | | | | | | |
| 2008–2012 | 18 | 0 | 1,405 | 5 | 385 | 3,594 | 4,103 | 812 | 10,321 |
| 2013 | 21 | 0 | 2,805 | 0 | 67 | 1,395 | 5,884 | 2,405 | 12,577 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

^a Knik River and tributaries including Jim Creek.

^b Big Lake and drainage streams.

^c Nancy Lake complex lakes.

^d Includes lakes and streams.

Table 69.—Westside Susitna River drainage northern pike catch by fishery, 1990–2013.

| Year | Alexander Creek ^a | Deshka River | Peters Creek | Lake Creek | Fish Creek ^b | Trapper Lake | Other streams ^c | Other lakes ^c | Total |
|-----------|------------------------------|--------------|--------------|------------|-------------------------|--------------|----------------------------|--------------------------|--------|
| 1990 | 3,149 | 0 | 0 | 589 | 3,065 | | 691 | 6,971 | 14,465 |
| 1991 | 2,866 | 0 | 0 | 376 | 2,490 | 1,997 | 13 | 3,451 | 11,193 |
| 1992 | 3,912 | 0 | 0 | 196 | 1,170 | 1,349 | 693 | 6,508 | 13,828 |
| 1993 | 12,172 | 0 | 0 | 596 | 3,885 | 4,128 | 3,098 | 198 | 24,077 |
| 1994 | 2,306 | 96 | 0 | 318 | 839 | 881 | 832 | 164 | 5,436 |
| 1995 | 7,651 | 0 | 0 | 334 | 1,288 | 2,359 | 2,862 | 920 | 15,414 |
| 1996 | 7,814 | 172 | 0 | 306 | 1,347 | 6,033 | 1,985 | | 17,657 |
| 1997 | 9,362 | 272 | 0 | 81 | 1,804 | 1,948 | 246 | 2,175 | 15,888 |
| 1998 | 10,386 | 113 | 0 | 1,015 | 418 | 1,729 | 556 | 3,704 | 17,921 |
| 1999 | 5,018 | 555 | 0 | 284 | 1,269 | 3,162 | | 4,060 | 14,348 |
| 2000 | 13,834 | 753 | 0 | 426 | 1,870 | | 2,887 | 7,611 | 27,381 |
| 2001 | 18,103 | 962 | 0 | 1030 | 1,467 | 891 | 2,694 | 0 | 25,147 |
| 2002 | 9,627 | 297 | 0 | 237 | 2,266 | 999 | 4,142 | 882 | 18,450 |
| 2003 | 6,649 | 515 | 0 | 799 | 2,228 | 2066 | 2,192 | 352 | 14,801 |
| 2004 | 11,833 | 1645 | 0 | 444 | 921 | 1456 | 4,010 | 1,569 | 21,878 |
| 2005 | 10,717 | 927 | 0 | 1074 | 1,815 | 2182 | 7,676 | 1,313 | 25,704 |
| 2006 | 2,886 | 1596 | 0 | 812 | 5,524 | 1971 | 2,248 | 621 | 15,658 |
| 2007 | 7,172 | 322 | 10 | 20 | 2,262 | 2099 | 280 | 475 | 12,640 |
| 2008 | 2,400 | 586 | 0 | 447 | 688 | 10626 | 377 | 652 | 15,776 |
| 2009 | 8,622 | 540 | 0 | 104 | 1,093 | 2760 | 327 | 1,796 | 15,242 |
| 2010 | 6,680 | 260 | 0 | 40 | 737 | 938 | 950 | 6,223 | 15,828 |
| 2011 | 6,397 | 421 | 0 | 404 | 192 | 377 | 3,066 | 9,766 | 20,623 |
| 2012 | 4,043 | 96 | 0 | 82 | 1,196 | 1066 | 759 | 2,444 | 9,686 |
| Average | | | | | | | | | |
| 2008–2012 | 5,628 | 381 | 0 | 215 | 781 | 3,153 | 1,096 | 4,176 | 15,431 |
| 2013 | 6,039 | 1317 | 0 | 2026 | 497 | 858 | 4,491 | 4,525 | 19,753 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

^a Alexander Creek drainage including Alexander Lake and Sucker Lake.

^b Fish Lake drainage (Yentna River drainage).

^c May include harvest from West Cook Inlet waters through 1995.

Table 70.—Number of fish stocked in Northern Cook Inlet Management Area waters, 2010–2013.

| Species and life stage | Site | Year | | | | FTP # | Expiration date |
|--------------------------------------|-------------------------------|-------------------|---------------------|---------|---------|-----------|-----------------|
| | | 2010 ^a | 2011 ^{a,b} | 2012 | 2013 | | |
| Chinook salmon anadromous smolt | | | | | | | |
| | Eklutna Tailrace (Knik River) | 152,014 | 122,962 | 160,347 | 94,609 | 12A-0006 | 12/31/2017 |
| | Deception Creek | 155,125 | 140,266 | 151,220 | 149,041 | 12A-0001 | 12/31/2019 |
| | Total | 307,139 | 263,228 | 311,567 | 243,650 | | |
| Coho salmon anadromous smolt | | | | | | | |
| | Eklutna Tailrace (Knik River) | 131,123 | 97,087 | 40,921 | 132,661 | 12A-0014 | 12/31/2017 |
| Coho salmon landlocked fingerlings | | | | | | | |
| | Barley Lake | 2,903 | 0 | 2,077 | 900 | 12A-0008 | 12/31/2017 |
| | Bear Paw Lake | 5,440 | 3,600 | 4,500 | 4,500 | 12A-0008 | 12/31/2017 |
| | Carpenter Lake | 40,700 | 8,377 | 38,428 | 15,000 | 12A-0008 | 12/31/2017 |
| | Christiansen Lake | 18,907 | 12,160 | 31,376 | 15,200 | 12A-0008 | 12/31/2017 |
| | Diamond Lake | 29,756 | 8,800 | 14,192 | 11,000 | 12A-0008 | 12/31/2017 |
| | Echo Lake | 2,300 | 2,640 | 2,300 | 1,645 | 12A-0008 | 12/31/2017 |
| | Johnson Lake | 1,000 | 0 | 1,000 | 1,039 | 12A-0008 | 12/31/2017 |
| | Kalmbach Lake | 11,000 | 8,800 | 25,724 | 11,000 | 12A-0008 | 12/31/2017 |
| | Klaire Lake | 900 | 720 | 934 | 642 | 12A-0008 | 12/31/2017 |
| | Loberg (Junction) Lake | 0 | 0 | 1,100 | 785 | 12A-0008 | 12/31/2017 |
| | Lucille Lake | 19,627 | 6,400 | 8,000 | 8,000 | 12A-0011 | 12/31/2017 |
| | Victor Lake | 2,700 | 2,160 | 2,752 | 1,928 | 12A-0008 | 12/31/2017 |
| | Willow Lake | 3,000 | 2,400 | 3,000 | 3,000 | 12-A-0010 | 12/31/2017 |
| | Total | 138,233 | 56,057 | 135,383 | 74,639 | | |
| Chinook salmon landlocked catchables | | | | | | | |
| | Finger Lake | 0 | 0 | 30,863 | 26,452 | 12A-0005 | 12/31/2017 |
| | Knik Lake | 0 | 0 | 3,486 | 1,890 | 12A-0005 | 12/31/2017 |
| | Matanuska Lake | 0 | 0 | 2,974 | 0 | 12A-0005 | 12/31/2017 |
| | Memory Lake | 0 | 0 | 2,167 | 0 | 12A-0005 | 12/31/2017 |
| | Total | 0 | 0 | 39,490 | 28,342 | | |

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Table 70.–Page 2 of 6.

| Species and life stage | Site | Year | | | | FTP # | Expiration date |
|--------------------------------------|--------------------------------|-------------------|---------------------|-------|-------|----------|-----------------|
| | | 2010 ^a | 2011 ^{a,b} | 2012 | 2013 | | |
| Chinook salmon landlocked fingerling | | | | | | | |
| | Finger Lake | 114,148 | 0 | 0 | 0 | 05A-0060 | 12/31/2014 |
| | Knik Lake | 27,098 | 0 | 0 | 0 | 05A-0060 | 12/31/2014 |
| | Matanuska | 67,160 | 0 | 0 | 0 | 05A-0060 | 12/31/2014 |
| | Memory Lake | 0 | 0 | 0 | 0 | 05A-0060 | 12/31/2014 |
| | Total | 208,406 | 0 | 0 | 0 | | |
| Rainbow trout landlocked catchables | | | | | | | |
| | Bruce Lake | 2,086 | 0 | 992 | 1,239 | 11A-0020 | 12/31/2015 |
| | Canoe Lake | 4,100 | 0 | 2,007 | 2,005 | 11A-0020 | 12/31/2015 |
| | Coyote | 0 | 0 | 300 | 300 | 11A-0021 | 12/31/2015 |
| | Echo Lake | 3,211 | 0 | 1,550 | 1,511 | 11A-0020 | 12/31/2015 |
| | Irene Lake | 3,700 | 0 | 1,205 | 859 | 11A-0020 | 12/31/2015 |
| | Gate Lake | 0 | 0 | 973 | 500 | 11A-0021 | 12/31/2015 |
| | Kashwitna | 0 | 0 | 3,700 | 4,956 | 11A-0021 | 12/31/2015 |
| | Kepler/Bradley Lake | 8,848 | 1,734 | 4,989 | 8,424 | 11A-0020 | 12/31/2015 |
| | Knik Lake | 4,295 | 525 | 5,672 | 2,303 | 11A-0020 | 12/31/2015 |
| | Knob Lake | 0 | 0 | 2,912 | 3,234 | 11A-0020 | 12/31/2015 |
| | Loberg (Junction) Lake | 2,200 | 0 | 990 | 3,273 | 11A-0020 | 12/31/2015 |
| | Long Lake (Mile 86 Glenn Hwy.) | 7,494 | 0 | 3,539 | 4,999 | 11A-0020 | 12/31/2015 |
| | Lucille Lake | 0 | 0 | 6,413 | 8,690 | 11A-0023 | 12/31/2015 |
| | Matanuska Lake | 10,010 | 0 | 5,937 | 6,071 | 11A-0020 | 12/31/2015 |
| | Meirs Lake | 2,600 | 0 | 1,212 | 1,252 | 11A-0020 | 12/31/2015 |
| | Memory Lake | 5,154 | 0 | 2,681 | 2,488 | 11A-0020 | 12/31/2015 |
| | Mile 180 Lake | 0 | 0 | 2,822 | 2,200 | 11A-0021 | 12/31/2015 |
| | North Knob Lake | 0 | 0 | 685 | 750 | 11A-0020 | 12/31/2015 |
| | Ravine Lake | 4,320 | 0 | 3,468 | 1,250 | 11A-0020 | 12/31/2015 |
| | Reflections Lake | 0 | 0 | 600 | 600 | 11A-0020 | 12/31/2015 |
| | Rocky Lake | 2,209 | 0 | 1,385 | 500 | 11A-0020 | 12/31/2015 |
| | Slipper (Eska) Lake | 0 | 0 | 1,670 | 1,531 | 11A-0021 | 12/31/2015 |
| | South Rolly Lake | 0 | 0 | 5,315 | 5,400 | 11A-0023 | 12/31/2015 |

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Table 70.–Page 3 of 6.

| Species and life stage | Site | Year | | | | FTP # | Expiration date |
|---|-------------------|-------------------|---------------------|--------|----------|------------|-----------------|
| | | 2010 ^a | 2011 ^{a,b} | 2012 | 2013 | | |
| Rainbow trout landlocked catchables (cont.) | Tanaina Lake | 0 | 0 | 2,502 | 2,503 | 11A-0023 | 12/31/2015 |
| | Walby Lake | 0 | 0 | 1,500 | 1,549 | 11A-0021 | 12/31/2015 |
| | Weiner Lake | 0 | 0 | 1,987 | 2,567 | 11A-0021 | 12/31/2015 |
| | Willow Lake | 0 | 0 | 2,381 | 2,250 | 11A-0021 | 12/31/2015 |
| | Total | 60,227 | 2,259 | 71,399 | 75,217 | | |
| Rainbow trout landlocked fingerlings | Barley Lake | 1,700 | 0 | 4,250 | 3,000 | 11A-0023 | 12/31/2015 |
| | Bear Paw Lake | 6,165 | 2,280 | 5,000 | 5,922 | 11A-0023 | 12/31/2015 |
| | Bench Lake | 0 | 1700 | 0 | 1,500 | 11A-0023 | 12/31/2015 |
| | Benka | 6,066 | 7,493 | 0 | 7,000 | 11A-0023 | 12/31/2015 |
| | Beverly Lake | 4,200 | 4,200 | 5,200 | 5,000 | 11A-0024 | 12/31/2015 |
| | Big Beaver Lake | 16,100 | 16,236 | 16,100 | 15,900 | 11A-0024 | 12/31/2015 |
| | Boot Lake | 2,933 | 0 | 0 | 0 | 11A-0024 | 12/31/2015 |
| | Brockler lake | 2,250 | 2,100 | 4,250 | 4,800 | 11A-0024 | 12/31/2015 |
| | Carpenter Lake | 22,371 | 21,653 | 16,660 | 22,623 | 11A-0023 | 12/31/2015 |
| | Caswell #3 Lake | 3,000 | 3,000 | 4,250 | 4,800 | 11A-0025 | 12/31/2015 |
| | Christiansen Lake | 11,435 | 18,257 | 9,860 | 11,600 | 11A-0023 | 12/31/2015 |
| | Crooked Lake | 10,900 | 10,378 | 0 | 0 | 11A-0024 | 12/31/2015 |
| | Crystal Lake | 17,300 | 18,115 | 17,300 | 17,800 | 11A-0025 | 12/31/2015 |
| | Dawn Lake | 2,400 | 2,526 | 3,000 | 3,000 | 11A-0025 | 12/31/2015 |
| | Diamond Lake | 13,500 | 13,905 | 15,000 | 17,973 | 11A0023 | 12/31/2015 |
| | Echo Lake | 0 | 5,200 | 0 | 1,511 | N/A | 12/31/2015 |
| | Farmer Lake | 1,000 | 1,100 | 935 | 1,900 | 11A-0023 | 12/31/2015 |
| | Finger Lake | 58,982 | 33,408 | 55,315 | 74,798 | 11A-0023 | 12/31/2015 |
| | Florence Lake | 5,500 | 5,700 | 5,499 | 5,500 | 11A-0023 | 12/31/2015 |
| | Gate Lake | 1,000 | 0 | 0 | 500 | N/A | 12/31/2015 |
| Golden Lake | 1,485 | 1,500 | 3,000 | 3,013 | 11A-0023 | 12/31/2015 | |
| Goober Lake | 0 | 0 | 0 | 0 | 11A-0023 | 12/31/2015 | |
| Homestead Lake | 1,700 | 1,832 | 3,200 | 3,200 | 11A-0025 | 12/31/2015 | |
| Honeybee Lake | 7,714 | 6,813 | 6,800 | 6,800 | 11A-0023 | 12/31/2015 | |
| Ida Lake | 5,400 | 5,100 | 4,600 | 5,000 | 11A-0023 | 12/31/2015 | |

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Table 70.–Page 4 of 6.

| Species and life stage | Site | Year | | | | FTP # | Expiration date |
|--|------------------------|-------------------|---------------------|--------|--------|----------|-----------------|
| | | 2010 ^a | 2011 ^{a,b} | 2012 | 2013 | | |
| Rainbow trout landlocked fingerlings (cont.) | Johnson | 0 | 0 | 0 | 2,000 | 11A-0023 | 12/31/2015 |
| | Kalmbach Lake | 12,150 | 12,500 | 12,500 | 12,500 | 11A-0023 | 12/31/2015 |
| | Kepler/Bradley Lake | 8,848 | 2,673 | 0 | 0 | N/A | 12/31/2015 |
| | Knob Lake | 2,500 | 2,500 | 0 | 0 | 11A-0023 | 12/31/2015 |
| | Lalen Lake | 9,200 | 9,200 | 18,093 | 10,000 | 11A-0024 | 12/31/2015 |
| | Little Beaver Lake | 4,400 | 4,442 | 5,400 | 5,000 | 11A-0024 | 12/31/2015 |
| | Little Lonely Lake | 8,433 | 8,703 | 8,400 | 8,400 | 11A-0023 | 12/31/2015 |
| | Loberg (Junction) Lake | 0 | 2970 | 0 | 0 | N/A | 12/31/2015 |
| | Long Lake (K/B) | 5,400 | 7,000 | 5,400 | 7,000 | 11A-0023 | 12/31/2015 |
| | Long Mile 86 | 40,000 | 9,051 | 0 | 0 | 11A-0023 | 12/31/2015 |
| | Loon Lake | 14,300 | 14,300 | 16,000 | 19,183 | 11A-0025 | 12/31/2015 |
| | Lorraine Lake | 13,500 | 12,760 | 11,220 | 13,100 | 11A-0023 | 12/31/2015 |
| | Lucille Lake | 2,500 | 2,500 | 0 | 0 | 11A-0023 | 12/31/2015 |
| | Lynne Lake | 10,028 | 11,032 | 8,000 | 11,000 | 11A-0023 | 12/31/2015 |
| | Marion Lake | 11,250 | 11,380 | 11,300 | 11,300 | 11A-0023 | 12/31/2015 |
| | Meirs Lake | 2,000 | 0 | 0 | 1,252 | 11A-0023 | 12/31/2015 |
| | Morvro Lake | 4,500 | 0 | 4,096 | 0 | 11A-0025 | 12/31/2015 |
| | North Friend Lake | 8,100 | 7,867 | 7,225 | 8,200 | 11A-0024 | 12/31/2015 |
| | North Rolly Lake | 5,900 | 12,200 | 6,500 | 12,800 | 11A-0024 | 12/31/2015 |
| | Peggy Lake | 4,800 | 0 | 4,080 | 0 | 11A-0023 | 12/31/2015 |
| | Reed Lake | 2,000 | 2,000 | 3,000 | 3,000 | 11A-0023 | 12/31/2015 |
| | Rhein Lake | 9,400 | 10,200 | 11,100 | 10,900 | 11A-0024 | 12/31/2015 |
| | Ruby Lake | 2,400 | 0 | 0 | 0 | 11A-0024 | 12/31/2015 |
| | Seventeenmile Lake | 31,571 | 10,000 | 13,000 | 13,000 | 11A-0023 | 12/31/2015 |
| | Seymour Lake | 22,300 | 22,300 | | 22,300 | 11A-0025 | 12/31/2015 |
| | Slipper (Eska) Lake | 2,500 | 2,500 | 0 | 0 | 11A-0023 | 12/31/2015 |
| | South Friend Lake | 5,600 | 5,645 | 6,800 | 7,800 | 11A-0024 | 12/31/2015 |
| | Threemile Lake | 3,000 | 0 | 0 | 0 | 11A-0024 | 12/31/2015 |
| | Tigger Lake | 2,566 | 2,570 | 3,400 | 2,500 | 11A-0023 | 12/31/2015 |
| | Twin Island Lake | 15,100 | 14,596 | 6,800 | 5,000 | 11A-0024 | 12/31/2015 |
| | Vera Lake | 11,100 | 10,900 | 11,100 | 10,900 | 11A-0024 | 12/31/2015 |

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Table 70.–Page 5 of 6.

| Species and life stage | Site | Year | | | | FTP # | Expiration date |
|--|--------------------------------|-------------------|---------------------|---------|---------|-----------|-----------------|
| | | 2010 ^a | 2011 ^{a,b} | 2012 | 2013 | | |
| Rainbow trout landlocked fingerlings (cont.) | Visnaw Lake | 13,100 | 13,100 | 13,100 | 13,100 | 11A-0024 | 12/31/2015 |
| | Walby Lake | 2,500 | 2,475 | 1,500 | 0 | 11A-0023 | 12/31/2015 |
| | Weiner Lake | 2,500 | 2,500 | 0 | 0 | 11A-0024 | 12/31/2015 |
| | West Beaver | 8,250 | 8,260 | 8,250 | 8,000 | 11A-0024 | 12/31/2015 |
| | West Sunshine Lake | 4,500 | 4,500 | 3,825 | 4,200 | 11A-0024 | 12/31/2015 |
| | Wishbone Lake | 0 | 2600 | 0 | 2,575 | 11A-0024 | 12/31/2015 |
| | Wolf Lake | 0 | 9,207 | 10,000 | 10,000 | 11A-0025 | 12/31/2015 |
| | "X" Lake | 5,100 | 0 | 5,100 | 0 | 11A-0023 | 12/31/2015 |
| | "Y" Lake | 3,966 | 4,000 | 4,250 | 5,000 | 11A-0023 | 12/31/2015 |
| | Total | 518,363 | 440,927 | 403,682 | 467,176 | | |
| Arctic grayling landlocked fingerling ^c | Canoe Lake | 4,000 | 9,000 | 0 | 2,004 | 12A-0055 | 12/31/2012 |
| | Finger Lake | 8,000 | 18,000 | 0 | 4,170 | 12A-0055 | 12/31/2012 |
| | Florence Lake | 1,000 | 2,250 | 0 | 500 | 12A-0055 | 12/31/2012 |
| | Ida Lake | 3,703 | 8,325 | 0 | 1,648 | 12A-0055 | 12/31/2012 |
| | Kepler/Bradley Lake | 3,000 | 6,750 | 0 | 1,500 | 12A-0055 | 12/31/2012 |
| | Knik Lake | 2,775 | 0 | 0 | 958 | 12A-0055 | 12/31/2012 |
| | Lorraine Lake | 5,100 | 0 | 0 | 2,300 | 12A-0055 | 12/31/2012 |
| | Meirs Lake | 5,000 | 9,000 | 0 | 2,093 | 12A-0055 | 12/31/2012 |
| | Reed Lake | 1,000 | 2,250 | 0 | 500 | 12A-0055 | 12/31/2012 |
| | Total | 33,578 | 55,575 | 0 | 15,673 | | |
| Arctic char landlocked catchables | Benka Lake | 0 | 1,000 | 0 | 725 | 010A-0110 | 12/31/2014 |
| | Carpenter Lake | 1,869 | 0 | 1,448 | 557 | 010A-0110 | 12/31/2014 |
| | Echo Lake | 1,706 | 0 | 554 | 470 | 010A-0110 | 12/31/2014 |
| | Finger Lake | 0 | 2,631 | 0 | 2,200 | 010A-0110 | 12/31/2014 |
| | Irene Lake | 0 | 776 | 0 | 1,125 | 010A-0110 | 12/31/2014 |
| | Johnson Lake | 300 | 0 | 305 | 0 | 010A-0110 | 12/31/2014 |
| | Long Lake (Mile 86 Glenn Hwy.) | 3,637 | 164 | 2,578 | 2,893 | 010A-0110 | 12/31/2014 |
| | Lynne Lake | 800 | 0 | 859 | 1,142 | 010A-0110 | 12/31/2014 |
| | Marion Lake | 0 | 910 | 0 | 1,357 | 010A-0110 | 12/31/2014 |

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Table 70.–Page 6 of 6.

| Species and life stage | Site | Year | | | | FTP # | Expiration date | |
|---|-----------------------------------|-------------------|---------------------|-----------|-----------|-----------|-----------------|--|
| | | 2010 ^a | 2011 ^{a,b} | 2012 | 2013 | | | |
| Arctic char landlocked catchables (cont.) | Matanuska Lake | 0 | 1,631 | 437 | 1,670 | 010A-0110 | 12/31/2014 | |
| | Memory Lake | 400 | 0 | 440 | 1,964 | 010A-0110 | 12/31/2014 | |
| | Prator Lake | 500 | 0 | 0 | 750 | 010A-0110 | 12/31/2014 | |
| | Rush Lake | 0 | 0 | 300 | 0 | | | |
| | Seventeenmile Lake | 0 | 951 | 0 | 1,465 | 010A-0110 | 12/31/2014 | |
| | Total | | 9,212 | 8,063 | 8,933 | 18,331 | | |
| Arctic char landlocked fingerlings | Carpenter Lake | 3,754 | 0 | 0 | 0 | 10A-0010 | 12/31/2014 | |
| | | | | 10,783 | 0 | 10A-0010 | 12/31/2014 | |
| | Finger Lake | 0 | 5,902 | | | 10A-0010 | 12/31/2014 | |
| | Irene Lake | 0 | 0 | 0 | 0 | 10A-0010 | 12/31/2014 | |
| | Johnson Lake | 0 | 0 | 0 | 0 | 10A-0010 | 12/31/2014 | |
| | Long Lake (Mile 86 Glenn Hwy.) | 38,902 | 34,737 | 0 | 0 | 10A-0010 | 12/31/2014 | |
| | Lynne Lake | 0 | 0 | 0 | 0 | 10A-0010 | 12/31/2014 | |
| | Matanuska Lake | 0 | 3,068 | 10,032 | 0 | 10A-0010 | 12/31/2014 | |
| | Seventeenmile Lake | 0 | 0 | 0 | 0 | 10A-0010 | 12/31/2014 | |
| | Total | | 42,656 | 43,707 | 20,815 | 0 | | |
| | Total anadromous stockings | | 438,262 | 491,438 | 352,488 | 376,311 | | |
| Total landlocked stockings | | 1,010,675 | 606,588 | 671,654 | 671,326 | | | |
| Total stockings | | 2,459,612 | 1,098,026 | 1,024,142 | 1,047,637 | | | |

Source: ADF&G hatchery records.

^a Size of catchables decreased to subcatchable size due to loss of hot water at Ft. Richardson hatchery.

^b Catchable Chinook salmon and rainbow trout were not available due to Elmendorf hatchery closure in 2011.

^c Catchable Arctic grayling were first stocked in 2013.

Table 71.—Sport fish catch and harvest from stocked lakes in Northern Cook Inlet Management Area for landlocked salmon, Arctic char, and Rainbow trout, 2013.

| SWHS fishing sites | Days fished ^a | Effort (% of total) | Landlocked salmon | | | Arctic char | | | Rainbow trout | | |
|-----------------------------|--------------------------|----------------------|-------------------|-------|------------|-------------|------|------------|---------------|-------|------------|
| | | | Harvest | | | Harvest | | | Harvest | | |
| | | | Catch | Num. | % of catch | Catch | Num. | % of catch | Catch | Num. | % of catch |
| Bear Paw | 77 | 0.0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% |
| Benka | 346 | 0.8% | 0 | 0 | 0% | 468 | 0 | 0% | 126 | 13 | 10% |
| Beverley | 207 | 0.8% | 0 | 0 | 0% | 0 | 0 | 0% | 172 | 34 | 20% |
| Big Beaver | 52 | 0.2% | 0 | 0 | 0% | 0 | 0 | 0% | 61 | 61 | 100% |
| Bradley (Kepler Lk complex) | 262 | 1.0% | 0 | 0 | 0% | 0 | 0 | 0% | 694 | 176 | 25% |
| Bruce | 448 | 1.7% | 0 | 0 | 0% | 0 | 0 | 0% | 755 | 572 | 76% |
| Canoe (Kepler Lk complex) | 535 | 2.0% | 0 | 0 | 0% | 0 | 0 | 0% | 1,004 | 0 | 0% |
| Carpenter | 216 | 0.8% | 103 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% |
| Christiansen | 869 | 3.2% | 172 | 28 | 16% | 0 | 0 | 0% | 194 | 183 | 94% |
| Crooked | 235 | 0.9% | 0 | 0 | 0% | 0 | 0 | 0% | 205 | 0 | 0% |
| Crystal (near Willow) | 901 | 3.4% | 0 | 0 | 0% | 0 | 0 | 0% | 921 | 0 | 0% |
| Echo (Kepler Lk complex) | 307 | 1.1% | 0 | 0 | 0% | 174 | 0 | 0% | 357 | 33 | 9% |
| Finger | 6,118 | 22.8% | 4,757 | 1,130 | 24% | 479 | 169 | 35% | 8,129 | 1,665 | 20% |
| Fish Lake (Glenn Highway) | 20 | 0.1% | 0 | - | 0% | 0 | 0 | 0% | 216 | 0 | 0% |
| Florence | 373 | 1.4% | 0 | 0 | 0% | 0 | 0 | 0% | 103 | 103 | 100% |
| Irene (Kepler Lk complex) | 1,062 | 4.0% | 0 | 0 | 0% | 0 | 0 | 0% | 3,487 | 441 | 13% |
| Kalmbach (also Baptist Lk) | 206 | 0.8% | 739 | 88 | 12% | 52 | 0 | 0% | 1,297 | 164 | 13% |
| Kepler | 2,496 | 9.3% | 0 | 0 | 0% | 0 | 0 | 0% | 7,227 | 1,128 | 16% |
| Knik | 345 | 1.3% | 107 | 14 | 13% | 0 | 0 | 0% | 596 | 343 | 58% |
| Knob | 55 | 0.2% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% |
| Loberg (Junction) | 695 | 2.6% | 0 | 0 | 0% | 0 | 0 | 0% | 1,597 | 231 | 14% |

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Table 71.–Page 2 of 2.

| SWHS fishing sites | Days fished ^a | Effort (% of total) | Landlocked salmon | | | Arctic char | | | Rainbow trout | | |
|-----------------------------------|--------------------------|---------------------|-------------------|-------|------------|-------------|------|------------|---------------|-------|------------|
| | | | Harvest | | | Harvest | | | Harvest | | |
| | | | Catch | Num. | % of catch | Catch | Num. | % of catch | Catch | Num. | % of catch |
| Long (Kepler Lk complex) | 614 | 2.3% | 0 | 0 | 0% | 0 | 0 | 0% | 1,749 | 0 | 0% |
| Long (Mile 85 Glenn Hwy) | 922 | 0.2% | 0 | 0 | 0% | 226 | 35 | 15% | 1,402 | 13 | 1% |
| Loon | 61 | 0.2% | 0 | 0 | 0% | 0 | 0 | 0% | 56 | 22 | 39% |
| Lorraine | 491 | 1.8% | 0 | 0 | 0% | 0 | 0 | 0% | 591 | 300 | 51% |
| Lucille | 1,374 | 5.1% | 0 | 0 | 0% | 0 | 0 | 0% | 1,038 | 0 | 0% |
| Marion | 166 | 0.6% | 0 | 0 | 0% | 0 | 0 | 0% | 322 | 0 | 0% |
| Matanuska (Kepler Lk complex) | 910 | 3.4% | 1,206 | 433 | 36% | 556 | 140 | 25% | 1,664 | 212 | 13% |
| Meirs (in Palmer) | 77 | 0.3% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% |
| Memory | 3,378 | 12.6% | 541 | 0 | 0% | 87 | 35 | 40% | 1,587 | 321 | 20% |
| Prator | 206 | 0.8% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% |
| Ravine | 105 | 0.4% | 0 | 0 | 0% | 0 | 0 | 0% | 239 | 20 | 8% |
| Reflections | 55 | 0.2% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% |
| Rocky | 124 | 0.5% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% |
| Ruby | 66 | 0.2% | 0 | 0 | 0% | 0 | 0 | 0% | 439 | 0 | 0% |
| Seventeenmile | 165 | 0.6% | 0 | 0 | 0% | 0 | 0 | 0% | 54 | 20 | 37% |
| Seymour (was Herring Lk) | 617 | 2.3% | 0 | 0 | 0% | 0 | 0 | 0% | 423 | 219 | 52% |
| South Rolly (Nancy Lk Rec system) | 276 | 1.0% | 0 | 0 | 0% | 0 | 0 | 0% | 123 | 41 | 33% |
| Tigger (Talkeetna Lks) | 714 | 2.7% | 0 | 0 | 0% | 0 | 0 | 0% | 1,167 | 450 | 39% |
| Victor | 55 | 0.2% | 129 | 129 | 100% | 0 | 0 | 0% | 0 | 0 | 0% |
| Visnaw | 28 | 0.1% | 0 | 0 | 0% | 0 | 0 | 0% | 17 | 0 | 0% |
| Walby | 83 | 0.3% | 0 | 0 | 0% | 0 | 0 | 0% | 177 | 20 | 11% |
| Weiner | 149 | 0.6% | 0 | 0 | 0% | 0 | 0 | 0% | 478 | 478 | 100% |
| Wolf | 33 | 0.1% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% |
| X & Y (Talkeetna Lks) | 316 | 1.2% | 0 | 0 | 0% | 0 | 0 | 0% | 163 | 39 | 24% |
| Total | 26,810 | 100% | 7,754 | 1,822 | 23% | 2,042 | 379 | 19% | 38,847 | 7,319 | 19% |

Source: Alaska Sport Fishing Survey database [Internet]. 1996– . Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited October 14, 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Note: “Catch” is the number of fish harvested plus the number of fish released; “harvest” is the number of fish kept.

^a The number of days fished is not species-specific, but rather is the number of days fished for all species combined (including species not listed on this table).

Table 72.—Sport fish catch and harvest from stocked lakes in Northern Cook Inlet Management Area for Arctic grayling and Northern pike, and totals for landlocked salmon, Arctic char, rainbow trout, Arctic grayling, and northern pike, 2013.

| SWHS fishing sites | Days fished ^a | Effort (% of total) | Arctic grayling | | | Northern pike | | | Total ^b | | |
|-----------------------------|--------------------------|----------------------|-----------------|---------|------------|---------------|---------|------------|--------------------|---------|------------|
| | | | Catch | Harvest | | Catch | Harvest | | Catch | Harvest | |
| | | | | Num. | % of catch | | Num. | % of catch | | Num. | % of catch |
| Bear Paw | 77 | 0.0% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% |
| Benka | 346 | 0.8% | 0 | 0 | 0% | 0 | 0 | 0% | 594 | 13 | 0% |
| Beverley | 207 | 0.8% | 0 | 0 | 0% | 0 | 0 | 0% | 172 | 34 | 20% |
| Big Beaver | 52 | 0.2% | 0 | 0 | 0% | 0 | 0 | 0% | 61 | 61 | 0% |
| Bradley (Kepler Lk complex) | 262 | 1.0% | 0 | 0 | 0% | 0 | 0 | 0% | 694 | 176 | 25% |
| Bruce | 448 | 1.7% | 43 | 0 | 0% | 0 | 0 | 0% | 798 | 572 | 72% |
| Canoe (Kepler Lk complex) | 535 | 2.0% | 1,739 | 0 | 0% | 0 | 0 | 0% | 2,743 | 0 | 0% |
| Carpenter | 216 | 0.8% | 0 | 0 | 0% | 0 | 0 | 0% | 103 | 0 | 0% |
| Christiansen | 869 | 3.2% | 0 | 0 | 0% | 0 | 0 | 0% | 366 | 211 | 58% |
| Crooked | 235 | 0.9% | 0 | 0 | 0% | 0 | 0 | 0% | 205 | 0 | 0% |
| Crystal (near Willow) | 901 | 3.4% | 0 | 0 | 0% | 86 | 64 | 74% | 1,007 | 64 | 0% |
| Echo (Kepler Lk complex) | 307 | 1.1% | 17 | 0 | 0% | 0 | 0 | 0% | 548 | 33 | 6% |
| Finger | 6,118 | 22.8% | 21 | 21 | 100% | 11 | 0 | 0% | 13,397 | 2,985 | 22% |
| Fish Lake (Glenn Highway) | 20 | 0.1% | 0 | 0 | 0% | 0 | 0 | 0% | 216 | 0 | 0% |
| Florence | 373 | 1.4% | 0 | 0 | 0% | 0 | 0 | 0% | 103 | 103 | 100% |
| Irene (Kepler Lk complex) | 1,062 | 4.0% | 0 | 0 | 0% | 0 | 0 | 0% | 3,487 | 441 | 13% |
| Kalmbach (also Baptist Lk) | 206 | 0.8% | 0 | 0 | 0% | 0 | 0 | 0% | 2,088 | 252 | 12% |
| Kepler | 2,496 | 9.3% | 171 | 43 | 25% | 0 | 0 | 0% | 7,398 | 1,171 | 16% |
| Knik | 345 | 1.3% | 11 | 11 | 100% | 0 | 0 | 0% | 714 | 368 | 0% |
| Knob | 55 | 0.2% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% |
| Loberg (Junction) | 695 | 2.6% | 0 | 0 | 0% | 0 | 0 | 0% | 1,597 | 231 | 0% |

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Table 72.–Page 2 of 2.

| SWHS fishing sites | Days fished ^a | Effort (% of total) | Arctic grayling | | | Northern pike | | | Total ^b | | |
|-----------------------------------|--------------------------|---------------------|-----------------|-----------|------------|---------------|------------|------------|--------------------|--------------|------------|
| | | | Harvest | | | Harvest | | | Harvest | | |
| | | | Catch | Num. | % of catch | Catch | Num. | % of catch | Catch | Num. | % of catch |
| Long (Kepler Lk complex) | 614 | 2.3% | 0 | 0 | 0% | 0 | 0 | 0% | 1,749 | 0 | 0% |
| Long (Mile 85 Glenn Hwy) | 922 | 0.2% | 187 | 0 | 0% | 0 | 0 | 0% | 1,815 | 48 | 3% |
| Loon | 61 | 0.2% | 0 | 0 | 0% | 0 | 0 | 0% | 56 | 22 | 39% |
| Lorraine | 491 | 1.8% | 0 | 0 | 0% | 0 | 0 | 0% | 591 | 300 | 51% |
| Lucille | 1,374 | 5.1% | 0 | 0 | 0% | 0 | 0 | 0% | 1,038 | 0 | 0% |
| Marion | 166 | 0.6% | 0 | 0 | 0% | 0 | 0 | 0% | 322 | 0 | 0% |
| Matanuska (Kepler Lk complex) | 910 | 3.4% | 0 | 0 | 0% | 0 | 0 | 0% | 3,426 | 785 | 23% |
| Meirs (in Palmer) | 77 | 0.3% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% |
| Memory | 3,378 | 12.6% | 0 | 0 | 0% | 107 | 0 | 0% | 2,322 | 356 | 0% |
| Prator | 206 | 0.8% | 0 | 0 | 0% | 21 | 21 | 100% | 21 | 21 | 100% |
| Ravine | 105 | 0.4% | 0 | 0 | 0% | 0 | 0 | 0% | 239 | 20 | 8% |
| Reflections | 55 | 0.2% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% |
| Rocky | 124 | 0.5% | 0 | 0 | 0% | 43 | 43 | 100% | 43 | 43 | 0% |
| Ruby | 66 | 0.2% | 0 | 0 | 0% | 0 | 0 | 0% | 439 | 0 | 0% |
| Seventeenmile | 165 | 0.6% | 0 | 0 | 0% | 0 | 0 | 0% | 54 | 20 | 37% |
| Seymour (was Herring Lk) | 617 | 2.3% | 0 | 0 | 0% | 0 | 0 | 0% | 423 | 219 | 52% |
| South Rolly (Nancy Lk Rec system) | 276 | 1.0% | 0 | 0 | 0% | 21 | 21 | 100% | 144 | 62 | 43% |
| Tigger (Talkeetna Lks) | 714 | 2.7% | 0 | 0 | 0% | 0 | 0 | 0% | 1,167 | 450 | 39% |
| Victor | 55 | 0.2% | 0 | 0 | 0% | 0 | 0 | 0% | 129 | 129 | 100% |
| Visnaw | 28 | 0.1% | 0 | 0 | 0% | 0 | 0 | 0% | 17 | 0 | 0% |
| Walby | 83 | 0.3% | 0 | 0 | 0% | 0 | 0 | 0% | 177 | 20 | 11% |
| Weiner | 149 | 0.6% | 0 | 0 | 0% | 0 | 0 | 0% | 478 | 478 | 100% |
| Wolf | 33 | 0.1% | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% |
| X & Y (Talkeetna Lks) | 316 | 1.2% | 0 | 0 | 0% | 0 | 0 | 0% | 163 | 39 | 0% |
| Total | 26,810 | 100% | 2,189 | 75 | 3% | 289 | 149 | 52% | 51,121 | 9,744 | 19% |

Source: Alaska Sport Fishing Survey database [Internet]. 1996– . Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited October 14, 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Note: “Catch” is the number of fish harvested plus the number of fish released; “harvest” is the number of fish kept.

^a The number of days fished is not species-specific, but rather is the number of days fished for all species combined (including species not listed on this table).

^b Totals include data from Table 71: landlocked salmon, Arctic char, rainbow trout, Arctic grayling, and northern pike.

Table 73.—Northern Cook Inlet Management Area lake stocking summary for nonanadromous fish, 2013.

| Species | Lake | Surface acres | Stocking date | Number stocked | Broodstock ^a | Ploidy | Hatchery ^b | Stocking size (g) | Stocking method ^c |
|---------------|--------------|---------------|---------------|----------------|-------------------------|--------|-----------------------|-------------------|------------------------------|
| Rainbow trout | | | | | | | | | |
| | Barley | 19 | 4 Sep | 3,000 | 13 Swanson R | 2N | WJHSFH | 2.1 | T-BU |
| | Bearpaw | 45 | 7 Mar | 5,922 | 12 Swanson R | 2N | Ft. Richardson | 5.4 | T-BU |
| | Benka | 123 | 9 Mar | 7,000 | 13 Swanson R | 2N | WJHSFH | 1.8 | T-BU |
| | Beverly | 42 | 9 Mar | 5,000 | 13 Swanson R | 3N | WJHSFH | 2.6 | T-BU |
| | Big Beaver | 161 | 9 Mar | 15,900 | 13 Swanson R | 3N | WJHSFH | 2.6 | T |
| | Brocker | 44.2 | 4 Sep | 4,800 | 12 Swanson R | 3N | WJHSFH | 2.6 | T |
| | Bruce | 27 | 14 Jun | 1,239 | 12 Swanson R | 3N | WJHSFH | 106.5 | T |
| | Canoe | 21 | 24 May | 2,005 | 12 Swanson R | 3N | WJHSFH | 115.2 | T-BU |
| | Carpenter | 176 | 21 Jun | 22,623 | 12 Swanson R | 3N | Ft. Richardson | 5.3 | T |
| | Caswell #3 | 33 | 9 Mar | 4,800 | 13 Swanson R | 2N | WJHSFH | 1.8 | T |
| | Christiansen | 179 | 9 Mar | 11,600 | 13 Swanson R | 2N | WJHSFH | 1.8 | T |
| | Coytote | 2.4 | 10 Jun | 300 | 12 Swanson R | 3N | WJHSFH | 96.0 | T |
| | Crystal | 132 | 9 Apr | 17,800 | 13 Swanson R | 2N MX | WJHSFH | 2.1 | T |
| | Dawn | 12 | 9 Apr | 3,000 | 13 Swanson R | 2N MX | WJHSFH | 2.1 | T-BU |
| | Diamond | 139 | 3 Jul | 17,973 | 12 Swanson R | 2N | Ft. Richardson | 5.4 | T |
| | Echo | 23 | 31 May | 1,511 | 12 Swanson R | 3N | WJHSFH | 105.4 | T |
| | Farmer | 21 | 4 Sep | 1,900 | 13 Swanson R | 2N MX | WJHSFH | 2.1 | T-BU |
| | Finger | 362 | 21 Jun | 1,200 | 12 Swanson R | 3N | Ft. Richardson | 5.3 | T |
| | | | 1 Jul | 32,000 | 12 Swanson R | 3N | Ft. Richardson | 4.3 | T |
| | | | 16 Oct | 18,936 | 13 Swanson R | 2N MX | WJHSFH | 4.9 | T |
| | | | 16 Oct | 19,376 | 13 Swanson R | 2N | WJHSFH | 4.5 | T |
| | | | 16 Oct | 3,286 | 13 Swanson R | 3N | WJHSFH | 3.5 | T |
| | Florence | 55 | 4 Sep | 5,500 | 13 Swanson R | 2N | WJHSFH | 2.1 | T-BU |
| | Gate | 8.5 | 12 Jun | 500 | 12 Swanson R | 3N | WJHSFH | 107.0 | T |
| | Golden | 13 | 3 Jul | 3,013 | 12 Swanson R | 2N | Ft. Richardson | 5.4 | T |
| | Homestead | 17 | 4 Sep | 3,200 | 13 Swanson R | 2N MX | WJHSFH | 2.1 | T-BU |
| | Honeybee | 58 | 4 Sep | 6,800 | 13 Swanson R | 2N MX | WJHSFH | 2.1 | T-BU |
| | Ida | 46 | 30 Aug | 5,000 | 13 Swanson R | 2N | WJHSFH | 1.8 | T-BU |

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Table 73.—Page 2 of 5.

| Species | Lake | Surface acres | Stocking date | Number stocked | Broodstock ^a | Ploidy | Hatchery ^b | Stocking size (g) | Stocking method ^c |
|-----------------------|----------------|---------------|---------------|----------------|-------------------------|----------|-----------------------|-------------------|------------------------------|
| Rainbow trout (cont.) | Irene | 18 | 24 May | 859 | 12 Swanson R | 3N | WJHSFH | 115.2 | T-BU |
| | | | 31 May | 1,102 | 12 Swanson R | 3N | WJHSFH | 105.4 | T-BU |
| | Kalmbach | 125 | 2 Jul | 12,500 | 12 Swanson R | 2N-3N MX | Ft. Richardson | 4.8 | T |
| | Kashwitna | 161 | 14 Jun | 3,768 | 12 Swanson R | 3N | WJHSFH | 96.0 | T |
| | | | 19 Jul | 1,188 | 12 Swanson R | 3N | WJHSFH | 100.0 | T |
| | Kepler-Bradley | 58 | 22 May | 76 | 09 Swanson R | 2N | Ft. Richardson | 528.0 | T |
| | | | 22 May | 2,953 | 12 Swanson R | 3N | WJHSFH | 110.0 | T |
| | | | 22 May | 104 | 10 Swanson R | 2N | Ft. Richardson | 564.0 | T |
| | | | 15 Jul | 3,048 | 12 Swanson R | 3N | WJHSFH | 93.0 | T |
| | Knik | 50 | 29 Aug | 2,243 | 12 Swanson R | 3N | WJHSFH | 130.0 | T |
| | | | 24 May | 2,303 | 12 Swanson R | 3N | WJHSFH | 115.2 | T |
| | | | 17 Jul | 532 | 12 Swanson R | 3N | WJHSFH | 100.0 | T |
| | Knob | 52 | 14 Jun | 3,234 | 12 Swanson R | 3N | WJHSFH | 96.0 | T |
| | Lalen | 92 | 3 Sep | 10,000 | 13 Swanson R | 3N | WJHSFH | 2.6 | T |
| | Little Beaver | 44 | 3 Sep | 5,000 | 13 Swanson R | 3N | WJHSFH | 2.6 | T |
| | Little Lonely | 56 | 4 Sep | 8,400 | 13 Swanson R | 2N MX | WJHSFH | 2.1 | T |
| | | | 22 May | 76 | 09 Swanson R | 3N | Ft. Richardson | 528.0 | T |
| | Loberg | 11 | 22 May | 104 | 10 Swanson R | 2N | Ft. Richardson | 564.0 | T |
| | | | 22 May | 1,136 | 12 Swanson R | 3N | WJHSFH | 110.0 | T |
| | | | 15 Jul | 2,061 | 12 Swanson R | 2N | WJHSFH | 93.0 | T |
| | | | 12 Sep | 7,000 | 13 Swanson R | 2N | WJHSFH | 2.5 | T-BU |
| | Long [K-B] | 74 | 12 Sep | 7,000 | 13 Swanson R | 2N | WJHSFH | 2.5 | T-BU |
| | | | 7 Jun | 350 | 12 Swanson R | 2N | Ft. Richardson | 458.0 | T |
| | Long (Mi. 86) | 106 | 7 Jun | 3,569 | 10 Swanson R | 3N | WJHSFH | 96.0 | T |
| | | | 17 Jul | 1,080 | 12 Swanson R | 3N | WJHSFH | 100.0 | T |
| | | | 3 Jul | 19,183 | 12 Swanson R | 2N | Ft. Richardson | 5.4 | T |
| | Lorraine | 132 | 26 Sep | 13,100 | 13 Swanson R | 2N MX | WJHSFH | 3.0 | T-4W |
| | Lucille | 362 | 23 May | 6,571 | 12 Swanson R | 3N | WJHSFH | 110.0 | T |
| | | | 15 Jul | 2,119 | 12 Swanson R | 3N | WJHSFH | 93.0 | T |
| | Lynne | 70 | 4 Sep | 11,000 | 13 Swanson R | 2N MX | WJHSFH | 2.1 | T |
| Marion | 113 | 4 Sep | 11,300 | 13 Swanson R | 2N MX | WJHSFH | 2.1 | T-BU | |
| Matanuska | 62 | 30 May | 6,071 | 12 Swanson R | 3N | WJHSFH | 105.4 | T | |

-continued-

Table 73.—Page 3 of 5.

| Species | Lake | Surface acres | Stocking date | Number stocked | Broodstock ^a | Ploidy | Hatchery ^b | Stocking size (g) | Stocking method ^c | |
|-----------------------|---------------------------|---------------|---------------|----------------|-------------------------|--------|-----------------------|-------------------|------------------------------|--|
| Rainbow trout (cont.) | Meirs | 17 | 22 May | 1,252 | 12 Swanson R | 3N | WJHSFH | 110.0 | T | |
| | Memory | 84 | 24 May | 2,488 | 12 Swanson R | 3N | WJHSFH | 115.2 | T | |
| | Mile 180 | 30.6 | 9 Jul | 2,200 | 12 Swanson R | 3N | WJHSFH | 100.0 | T-BU | |
| | North Friend | 81 | 3 Sep | 8,200 | 13 Swanson R | 3N | WJHSFH | 2.6 | T-BU | |
| | North Knob | 36.2 | 14 Jun | 750 | 12 Swanson R | 3N | WJHSFH | 96.0 | T-BU | |
| | North Rolly | 122 | 4 Sep | 12,800 | 13 Swanson R | 3N | WJHSFH | 2.6 | T-BU | |
| | Ravine | 12 | 14 Jun | 1,250 | 12 Swanson R | 3N | WJHSFH | 96.0 | T-BU | |
| | Reed | 20 | 1 Jul | 3,000 | 12 Swanson R | 3N | Ft. Richardson | 4.3 | T-BU | |
| | Rhein | 84 | 4 Sep | 10,900 | 13 Swanson R | 3N | WJHSFH | 2.6 | T-BU | |
| | Rocky | 59 | 13 Jun | 1,487 | 12 Swanson R | 3N | WJHSFH | 96.0 | T | |
| | | | 17 Jul | 500 | 12 Swanson R | 3N | WJHSFH | 100.0 | | |
| | Seventeenmile | 100 | 30 Aug | 13,000 | 13 Swanson R | 2N | WJHSFH | 1.8 | T | |
| | Seymour | 229 | 2 Jul | 22,300 | 12 Swanson R | 3N | Ft. Richardson | 4.8 | T | |
| | Slipper | 9 | 10 Jun | 1,531 | 12 Swanson R | 3N | WJHSFH | 96.0 | T | |
| | South Friend | 56 | 3 Sep | 7,800 | 13 Swanson R | 3N | WJHSFH | 2.6 | T-BU | |
| | South Rolly | 108 | 6 Jun | 5,400 | 12 Swanson R | 3N | WJHSFH | 96.0 | T | |
| | Tanaina | 109 | 14 Jun | 2,503 | 12 Swanson R | 3N | WJHSFH | 96.0 | T-BU | |
| | Tigger | 19 | 3 Sep | 2,500 | 13 Swanson R | 3N | WJHSFH | 1.8 | T-BU | |
| | Twin Island | 151 | 26 Sep | 5,000 | 13 Swanson R | 3N | WJHSFH | 2.1 | T-4W | |
| | Vera | 111 | 4 Sep | 10,900 | 13 Swanson R | 3N | WJHSFH | 2.6 | T-BU | |
| | Visnaw | 131 | 2 Jul | 13,100 | 12 Swanson R | 3N | Ft. Richardson | 4.8 | T | |
| | Walby | 54 | 24 May | 1,549 | 12 Swanson R | 3N | WJHSFH | 115.2 | T | |
| | Weiner | 21 | 14 Jun | 567 | 12 Swanson R | 3N | WJHSFH | 100.0 | T | |
| | | | 17 Jul | 2,000 | 12 Swanson R | 3N | WJHSFH | 96.0 | T | |
| | West Beaver | 103 | 3 Sep | 8,000 | 13 Swanson R | 3N | WJHSFH | 2.6 | T | |
| | West Sunshine | 22 | 3 Sep | 4,200 | 13 Swanson R | 3N | WJHSFH | 2.6 | T-BU | |
| | Willow | 143 | 6 Jun | 2,250 | 12 Swanson R | 3N | WJHSFH | 96.0 | T-BU | |
| | Wolf | 62 | 1 Jul | 10,000 | 12 Swanson R | 3N | Ft. Richardson | 4.3 | T-BU | |
| | “Y” | 40 | 3 Sep | 5,000 | 13 Swanson R | 3N | WJHSFH | 1.8 | T-BU | |
| | Total for 70 lakes | | 4,543 | | 539,641 | | | | | |
| | Total diploid fingerling | | | | 226,748 | | | | | |
| | Total triploid fingerling | | | | 312,893 | | | | | |

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Table 73.—Page 4 of 5.

| Species | Lake | Surface acres | Stocking date | Number stocked | Broodstock ^a | Ploidy | Hatchery ^b | Stocking size (g) | Stocking method ^c |
|-------------|---------------------------|---------------|---------------|----------------|-------------------------|--------|-----------------------|-------------------|------------------------------|
| Coho salmon | | | | | | | | | |
| | Barley | 19 | 10 Jul | 900 | 11 Ship Creek | 3N | WJHSFH | 6.6 | T-BU |
| | Bearpaw | 45 | 9 Jul | 4,500 | 11 Ship Creek | 3N | WJHSFH | 6.6 | T |
| | Carpenter | 176 | 10 Jul | 15,000 | 11 Ship Creek | 3N | WJHSFH | 5.5 | T |
| | Christiansen | 179 | 9 Jul | 15,200 | 11 Ship Creek | 3N | WJHSFH | 6.6 | T |
| | Diamond | 139 | 10 Jul | 11,000 | 11 Ship Creek | 3N | WJHSFH | 6.6 | T |
| | Echo | 23 | 8 Jul | 1,645 | 11 Ship Creek | 3N | WJHSFH | 6.6 | T |
| | Johnson | 40 | 11 Jul | 1,039 | 11 Ship Creek | 3N | WJHSFH | 5.5 | T |
| | Kalmbach | 125 | 9 Jul | 11,000 | 11 Ship Creek | 3N | WJHSFH | 6.6 | T |
| | Klaire | 7 | 8 Jul | 642 | 11 Ship Creek | 3N | WJHSFH | 6.6 | T-BU |
| | Loberg | 11 | 8 Jul | 785 | 11 Ship Creek | 3N | WJHSFH | 6.6 | T |
| | Lucille | 362 | 9 Jul | 8,000 | 11 Ship Creek | 3N | WJHSFH | 6.6 | T |
| | Victor | 14 | 8 Jul | 1,928 | 11 Ship Creek | 3N | WJHSFH | 6.6 | T-BU |
| | Willow | 143 | 9 Jul | 3,000 | 11 Ship Creek | 3N | WJHSFH | 6.6 | T |
| | Total for 13 lakes | 1,283 | | 74,639 | | | | | |
| | Total triploid fingerling | | | 74,639 | | | | | |
| Arctic char | | | | | | | | | |
| | Benka | 123 | 12 Jun | 725 | 11 Aleknagik L. | 3N | Ft. Richardson | 110.0 | T |
| | Carpenter | 176 | 24 Jul | 557 | 11 Aleknagik L. | 3N | Ft. Richardson | 123.0 | T |
| | Echo | 23 | 5 Jun | 470 | 11 Aleknagik L. | 3N | Ft. Richardson | 110.0 | T |
| | Finger | 362 | 23 May | 1,010 | 11 Aleknagik L. | 3N | Ft. Richardson | 129.0 | T |
| | | | 18 Jul | 1,190 | 11 Aleknagik L. | 3N | Ft. Richardson | 143.0 | T |
| | Irene | 18 | 5 Jun | 509 | 11 Aleknagik L. | 3N | Ft. Richardson | 110.0 | T-BU |
| | | | 25 Jul | 616 | 11 Aleknagik L. | 3N | Ft. Richardson | 123.0 | T-BU |
| | Long (Mi. 86) | 106 | 7 Jun | 1,031 | 11 Aleknagik L. | 3N | Ft. Richardson | 110.0 | T |
| | | | 18 Jul | 1,662 | 11 Aleknagik L. | 3N | Ft. Richardson | 143.0 | T |
| | | | 26 Nov | 200 | 12 Aleknagik L. | 2N | Ft. Richardson | 445.0 | T |
| | Lynne | 70 | 18 Jul | 1,142 | 11 Aleknagik L. | 3N | Ft. Richardson | 143.0 | T |
| | Marion | 113 | 17 Jul | 607 | 12 Aleknagik L. | 3N | Ft. Richardson | 143.0 | |
| | | | 24 Jul | 750 | 13 Aleknagik L. | 3N | Ft. Richardson | 123.0 | |

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Table 73.–Page 5 of 5.

| Species | Lake | Surface acres | Stocking date | Number stocked | Broodstock ^a | Ploidy | Hatchery ^b | Stocking size (g) | Stocking method ^c | |
|---------------------|---------------------------|---------------|---------------|----------------|-------------------------|--------|-----------------------|-------------------|------------------------------|--|
| Arctic char (cont.) | Matanuska | 62 | 5 Jun | 840 | 11 Aleknagik L. | 3N | Ft. Richardson | 110.0 | T | |
| | | | 24 Jul | 830 | 11 Aleknagik L. | 3N | Ft. Richardson | 123.0 | T | |
| | Memory | 84 | 18 Jul | 1,964 | 11 Aleknagik L. | 3N | Ft. Richardson | 143.0 | T | |
| | Prator | 98 | 18 Jul | 750 | 11 Aleknagik L. | 3N | Ft. Richardson | 143.0 | T | |
| | Seventeenmile | 100 | 17 Jul | 1,302 | 11 Aleknagik L. | 3N | Ft. Richardson | 143.0 | T | |
| | | | 26 Nov | 163 | 12 Aleknagik L. | 2N | Ft. Richardson | 445.0 | T | |
| | Total for 11 lakes | | 1,335 | | 16,318 | | | | | |
| | Total diploid fingerling | | | | 0 | | | | | |
| | Total diploid catchables | | | | 363 | | | | | |
| | Total triploid fingerling | | | | 0 | 0 | | | | |
| | Total triploid catchables | | | | 15,955 | | | | | |
| Arctic grayling | Finger | | 23 May | 2,621 | 12 Chena River | 3N | WJHSFH | 86.0 | T | |
| | | | 31 May | 1,549 | 13 Chena River | 3N | WJHSFH | 88.0 | T | |
| | Knik | | 13 Jun | 958 | 12 Chena River | 3N | WJHSFH | 95.0 | T | |
| | Meirs | | 7 Jul | 2,093 | 12 Chena River | 3N | WJHSFH | 95.0 | T | |
| | Reed | | 6 Jun | 500 | 12 Chena River | 3N | WJHSFH | 90.0 | T-BU | |
| | Florence | | 12 Jun | 500 | 12 Chena River | 3N | WJHSFH | 95.0 | T | |
| | Ida | | 6 Jun | 1,648 | 12 Chena River | 3N | WJHSFH | 90.0 | T | |
| | Lorraine | | 12 Jun | 2,300 | 12 Chena River | 3N | WJHSFH | 95.0 | T | |
| | Canoe | | 31 May | 2,004 | 12 Chena River | 3N | WJHSFH | 89.0 | T | |
| | Kepler-Bradley | | 6 Jun | 1,500 | 12 Chena River | 3N | WJHSFH | 90.0 | T | |
| | Total for 9 lakes | | | | 15,673 | | | | | |
| Chinook salmon | Finger | 362 | 1 Oct | 11,922 | 12 Ship Creek | 3N | WJHSFH | 140.0 | T | |
| | | | 3 Oct | 3,623 | 12 Ship Creek | 3N | WJHSFH | 120.0 | T | |
| | | | 7 Oct | 10,907 | 12 Ship Creek | 2N/3N | WJHSFH | 123.0 | T | |
| | Knik | 50 | 3 Oct | 1,890 | 12 Ship Creek | 3N | WJHSFH | 120.0 | T | |
| | Total for 2 lakes | | | | 28,342 | | | | | |

Source: ADF&G Hatchery records.

^a Treatment: triploid all female.

^b WJHSFH is William J. Hernandez Sport Fish Hatchery.

^c “T” is tank truck; “T-BU” means fish were carried in buckets to lake; “T-4W” means transported by 4-wheeler.

Table 74.—Fish Creek salmon harvests, by commercial set gillnet and personal use dip net, 1987–2013.

| Year | Commercial gillnet harvest from statistical area 247-50 | | | | | | Personal use dip net harvest | | | | | |
|-----------|---|--------|---------------------------|------|--------------|--------|------------------------------|-------|------------|------------|---------|--------|
| | Sockeye | Coho | Chum | Pink | Chinook | Total | Sockeye | Coho | Chum | Pink | Chinook | Total |
| 1987 | 24,090 | 2,043 | 403 | 264 | ^a | 26,800 | 2,200 | | | | | 2,200 |
| 1988 | 38,251 | 11,604 | 325 | 591 | 9 | 50,780 | 3,000 | | | | | 3,000 |
| 1989 | 47,925 | 6,075 | 4,979 | 545 | 4 | 59,528 | 5,000 | | | | | 5,000 |
| 1990 | 23,450 | 5,708 | 5,308 | 696 | 4 | 35,166 | 6,500 | | | | | 6,500 |
| 1991 | 10,459 | 1,630 | 961 | 21 | ^a | 13,071 | 14,369 | | 549 | 567 | | 15,485 |
| 1992 | 10,748 | 1,817 | 1,289 | 573 | ^a | 14,427 | 19,002 | | 607 | 678 | | 20,287 |
| 1993 | 47,751 | 831 | 990 | 29 | ^a | 49,601 | 37,224 | 973 | 503 | 2,068 | | 40,768 |
| 1994 | 7,528 | 809 | 357 | 141 | 0 | 8,835 | 16,012 | 1,336 | 248 | 632 | | 18,228 |
| 1995 | 19,477 | 1,999 | 1,018 | 72 | 5 | 22,571 | 9,102 | 2,640 | 99 | 290 | | 12,131 |
| 1996 | 35,245 | 1,802 | 448 | 25 | 0 | 37,520 | 17,260 | 2,414 | 153 | 331 | 37 | 20,195 |
| 1997 | 13,791 | 85 | 31 | 1 | 1 | 13,909 | 3,277 | 63 | 4 | 53 | 0 | 3,397 |
| 1998 | 2,597 | 548 | 105 | 0 | 0 | 3,250 | 4,036 | 649 | 29 | 80 | 1 | 4,795 |
| 1999 | | | No fishery | | | | 1,083 | 17 | 0 | 12 | 0 | 1,112 |
| 2000 | | | No fishery | | | | 6,925 | 958 | 29 | 83 | 0 | 7,995 |
| 2001 | | | No fishery | | | | 463 ^b | 13 | 1 | 4 | 1 | 482 |
| 2002 | | | Fishery eliminated by BOF | | | | | | | No fishery | | |
| 2003 | | | | | | | | | No fishery | | | |
| 2004 | | | | | | | | | No fishery | | | |
| 2005 | | | | | | | | | No fishery | | | |
| 2006 | | | | | | | | | No fishery | | | |
| 2007 | | | | | | | | | No fishery | | | |
| 2008 | | | | | | | | | No fishery | | | |
| 2009 | | | | | | | 9,898 ^c | 53 | 33 | 66 | 10 | 10,060 |
| 2010 | | | | | | | 23,705 ^d | 3,576 | 290 | 1,721 | 12 | 29,303 |
| 2011 | | | | | | | 5,236 ^e | 905 | 72 | 155 | 2 | 6,370 |
| 2012 | | | No fishery | | | | | | No fishery | | | |
| 2013 | | | No fishery | | | | | | No fishery | | | |
| Average | | | | | | | | | | | | |
| 1987–2013 | 23,443 | 2,913 | 1,351 | 247 | 3 | 27,955 | 10,533 | 1,133 | 187 | 481 | 7 | 11,517 |

Source: Personal use 1987–1995 data are from Mills 1988–1994, Howe et al. 1996; Commercial Harvest 1996–2000 data are estimated from returned permits.

^a Not reported.

^b Closed by Emergency Order (EO) on 12 July at 11:00 PM (3 days of harvest).

^c Opened by EO from 1 August at 6:00 AM through 11 August at 11:00 PM.

^d Opened by EO from 24 July at 6:00 AM through 31 July at 11:00 PM.

^e Opened by EO from 29 July at 6:00 AM through 31 July at 11:00 PM.

Table 75.—Eulachon personal use harvest from Knik Arm and Westside Susitna River management units, 1985–2013.

| Year | Knik Arm Management Unit | | | | Westside Susitna Management Unit | | | | | | Total |
|-----------|--------------------------|--------------|-------------|-----------|----------------------------------|--------------|--------------|------------|---------------|-----------|--------|
| | Marine Fish Creek | Other marine | Fresh water | Sub-total | Alex-ander Creek | Deshka River | Yentna River | Lake Creek | Susitna River | Sub-total | |
| 1985 | 0 | 560 | 0 | 560 | 0 | 0 | | 0 | 1,680 | 1,680 | 2,240 |
| 1986 | 0 | 3,351 | 0 | 3,351 | 0 | 7,300 | | 0 | 0 | 7,300 | 10,651 |
| 1987 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 9,265 | 9,265 | 9,265 |
| 1988 | 0 | 0 | 0 | 0 | 1,547 | 0 | | 1,083 | 6,219 | 8,849 | 8,849 |
| 1989 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 785 | 1,539 | 2,324 | 2,324 |
| 1990 | 0 | 0 | 0 | 0 | 707 | 842 | 3,368 | 674 | 0 | 5,591 | 5,591 |
| 1991 | 0 | 0 | 0 | 0 | 3,774 | 245 | 0 | 0 | 2,113 | 6,132 | 6,132 |
| 1992 | 0 | 0 | 0 | 0 | 379 | 0 | 1,082 | 0 | 14,062 | 15,523 | 15,523 |
| 1993 | 0 | 0 | 0 | 0 | 0 | 2,236 | 0 | 0 | 4,360 | 6,596 | 6,596 |
| 1994 | 0 | 2,292 | 0 | 2,292 | 0 | 458 | 3,438 | 235 | 5,352 | 9,483 | 11,775 |
| 1995 | 0 | 0 | 0 | 0 | 0 | 0 | 1,382 | 0 | 3,167 | 4,549 | 4,549 |
| 1996 | 0 | 0 | 0 | 0 | 364 | 0 | 364 | 0 | 1,455 | 2,183 | 2,183 |
| 1997 | 0 | 0 | 0 | 0 | 0 | 0 | 2,703 | 0 | 5,812 | 8,515 | 8,515 |
| 1998 | 0 | 0 | 0 | 0 | 0 | 0 | 2,050 | 0 | 3,745 | 5,795 | 5,795 |
| 1999 | 2,708 | 0 | 0 | 2,708 | 571 | 6,499 | 3,038 | 0 | 16,923 | 27,031 | 29,739 |
| 2000 | 0 | 2,725 | 3,406 | 6,131 | 7 | 1,363 | 2,725 | 0 | 1,397 | 5,492 | 11,623 |
| 2001 | 0 | 675 | 899 | 1,574 | 0 | 0 | 3,935 | 0 | 4,772 | 8,707 | 10,281 |
| 2002 | 0 | 0 | 0 | 0 | 0 | 2,228 | 1,061 | 0 | 9 | 3,298 | 3,298 |
| 2003 | 0 | 1,214 | 364 | 1,578 | 911 | 0 | 0 | 0 | 4,554 | 5,465 | 7,043 |
| 2004 | 0 | 0 | 11 | 11 | 0 | 2,550 | 2,252 | 0 | 7,760 | 12,562 | 12,573 |
| 2005 | 0 | 0 | 0 | 0 | 0 | 1,979 | 0 | 0 | 1,089 | 3,068 | 3,068 |
| 2006 | 0 | 0 | 71 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2007 | 124 | 0 | 0 | 124 | 0 | 0 | 0 | 0 | 620 | 620 | 744 |
| 2008 | 0 | 0 | 0 | 0 | 0 | 1,095 | 0 | 0 | 737 | 1,832 | 1,832 |
| 2009 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,520 | 3,520 | 3,520 |
| 2010 | 0 | 0 | 0 | 0 | 0 | 0 | 2,510 | 0 | 2,133 | 4,643 | 4,643 |
| 2011 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,763 | 6,763 | 6,763 |
| 2012 | 0 | 0 | 0 | 0 | 0 | 0 | 3,290 | 0 | 0 | 3,290 | 3,290 |
| Average | | | | | | | | | | | |
| 1985–2012 | 101 | 386 | 170 | 657 | 295 | 957 | 1,383 | 99 | 3,895 | 6,431 | 7,088 |
| 2003–2012 | 12 | 121 | 45 | 178 | 91 | 562 | 805 | 0 | 2,718 | 4,176 | 4,355 |
| 2008–2012 | 0 | 0 | 0 | 0 | 0 | 219 | 1,160 | 0 | 2,631 | 4,010 | 4,010 |
| 2013 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 0 | 1,624 | 1,704 | 1,704 |

Source: Alaska Sport Fishing Survey database [Internet]. 1996– . Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited October 14, 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Note: Eulachon were grouped with “other fish” prior to 1985.

Table 76.—Beluga River senior personal use dip net fishery summary, 2008–2013.

| Year | Permits issued | Permits returned | Number fished | Boat | Shore | Harvest | | | | Total |
|-----------|----------------|------------------|---------------|------|-------|---------|------|------|------|-------|
| | | | | | | Sockeye | Chum | Coho | Pink | |
| 2008 | 20 | 20 | 5 | 2 | 3 | 31 | 0 | 35 | 0 | 66 |
| 2009 | 11 | 11 | 10 | 4 | 6 | 140 | 0 | 78 | 7 | 225 |
| 2010 | 14 | 9 | 5 | 3 | 2 | 47 | 5 | 1 | 0 | 53 |
| 2011 | 13 | 12 | 7 | 5 | 2 | 137 | 5 | 17 | 0 | 159 |
| 2012 | 7 | 7 | 4 | 2 | 2 | 9 | 0 | 7 | 0 | 16 |
| 2013 | 8 | 8 | 5 | 4 | 1 | 30 | 1 | 55 | 2 | 88 |
| Average | | | | | | | | | | |
| 2008–2013 | | | | | | 66 | 2 | 32 | 2 | 101 |

Source: Permits returned to ADF&G.

Table 77.—Upper Yentna River personal use and subsistence fish wheel salmon harvest, 1996–2013.

| Fishery | Year | Number of permits | | Salmon harvest (number of fish) | | | | | |
|--------------|-----------|-------------------|--------|---------------------------------|------|------|------|-------|----------------|
| | | Returned | Issued | Sockeye | Coho | Pink | Chum | Total | Harvest/permit |
| Personal use | | | | | | | | | |
| | 1996 | 14 | NR | 191 | 36 | 88 | 40 | 355 | 25 |
| | 1997 | 21 | NR | 492 | 61 | 21 | 8 | 582 | 28 |
| Subsistence | | | | | | | | | |
| | 1998 | 21 | 28 | 473 | 147 | 33 | 20 | 673 | 32 |
| | 1999 | 21 | NR | 455 | 43 | 15 | 11 | 524 | 25 |
| | 2000 | 20 | NR | 379 | 92 | 4 | 7 | 482 | 24 |
| | 2001 | 16 | NR | 514 | 47 | 9 | 4 | 574 | 36 |
| | 2002 | 25 | NR | 414 | 116 | 14 | 28 | 572 | 23 |
| | 2003 | 15 | NR | 433 | 76 | 2 | 13 | 524 | 35 |
| | 2004 | 22 | NR | 391 | 132 | 0 | 2 | 525 | 24 |
| | 2005 | 21 | NR | 177 | 42 | 24 | 25 | 268 | 13 |
| | 2006 | 23 | 26 | 388 | 178 | 15 | 27 | 608 | 26 |
| | 2007 | 22 | 22 | 367 | 66 | 17 | 18 | 468 | 21 |
| | 2008 | 16 | 16 | 310 | 57 | 23 | 7 | 397 | 25 |
| | 2009 | 16 | 17 | 253 | 14 | 0 | 6 | 273 | 17 |
| | 2010 | 26 | 26 | 675 | 52 | 41 | 18 | 786 | 30 |
| | 2011 | 25 | 25 | 598 | 90 | 3 | 21 | 712 | 28 |
| | 2012 | 20 | 21 | 279 | 24 | 21 | 19 | 384 | 19 |
| Average | | | | | | | | | |
| | 1996–2012 | 20 | 23 | 399 | 75 | 19 | 16 | 512 | 25 |
| | 2003–2012 | 21 | 22 | 387 | 73 | 15 | 16 | 495 | 24 |
| | 2008–2012 | 21 | 21 | 423 | 47 | 18 | 14 | 510 | 24 |
| | 2013 | 22 | 23 | 160 | 92 | 128 | 32 | 412 | 19 |

Source: Permits returned to ADF&G.

Note: NR means data not reported.

Table 78.—Tyonek subsistence gillnet salmon harvest, 1981–2013.

| Year | Number of permits | | Salmon harvest (number of fish) | | | | | | |
|-----------|-------------------|--------|---------------------------------|---------|------|------|------|-------|-------|
| | Returned | Issued | Chinook | Sockeye | Coho | Pink | Chum | Other | Total |
| 1981 | NA | 70 | 2,002 | 269 | 64 | 15 | 32 | NA | 2,382 |
| 1982 | NA | 69 | 1,590 | 310 | 113 | 14 | 4 | NA | 2,031 |
| 1983 | NA | 75 | 2,665 | 187 | 59 | 0 | 6 | NA | 2,917 |
| 1984 | NA | 75 | 2,200 | 266 | 79 | 3 | 23 | NA | 2,571 |
| 1985 | NA | 76 | 1,472 | 164 | 91 | 0 | 10 | NA | 1,737 |
| 1986 | NA | 65 | 1,676 | 203 | 223 | 50 | 46 | NA | 2,198 |
| 1987 | 61 | 64 | 1,610 | 166 | 149 | 10 | 24 | NA | 1,959 |
| 1988 | 42 | 47 | 1,587 | 91 | 253 | 8 | 12 | NA | 1,951 |
| 1989 | 47 | 49 | 1,250 | 85 | 115 | 0 | 1 | NA | 1,451 |
| 1990 | 37 | 42 | 781 | 66 | 352 | 20 | 12 | NA | 1,231 |
| 1991 | 54 | 57 | 902 | 20 | 58 | 0 | 0 | NA | 980 |
| 1992 | 44 | 57 | 907 | 75 | 234 | 7 | 19 | NA | 1,242 |
| 1993 | 54 | 62 | 1,370 | 57 | 77 | 19 | 17 | NA | 1,540 |
| 1994 | 49 | 58 | 770 | 85 | 101 | 0 | 22 | NA | 978 |
| 1995 | 55 | 70 | 1,317 | 45 | 153 | 0 | 15 | NA | 1,530 |
| 1996 | 49 | 73 | 1,039 | 68 | 137 | 21 | 7 | NA | 1,272 |
| 1997 | 42 | 70 | 639 | 101 | 137 | 0 | 8 | NA | 885 |
| 1998 | 49 | 74 | 1,027 | 163 | 64 | 1 | 2 | NA | 1,257 |
| 1999 | 54 | 77 | 1,230 | 144 | 94 | 32 | 11 | NA | 1,511 |
| 2000 | 59 | 60 | 1,157 | 63 | 87 | 6 | 0 | NA | 1,313 |
| 2001 | 58 | 84 | 976 | 172 | 49 | 4 | 6 | NA | 1,207 |
| 2002 | 71 | 101 | 1,080 | 209 | 115 | 9 | 4 | 1 | 1,418 |
| 2003 | 74 | 87 | 1,183 | 111 | 44 | 7 | 10 | NA | 1,355 |
| 2004 | 75 | 97 | 1,345 | 93 | 130 | 0 | 0 | 2 | 1,570 |
| 2005 | 66 | 78 | 982 | 61 | 139 | 0 | 2 | 0 | 1,184 |
| 2006 | 55 | 82 | 943 | 20 | 14 | 0 | 1 | 0 | 978 |
| 2007 | 67 | 84 | 1,281 | 200 | 123 | 3 | 2 | 0 | 1,609 |
| 2008 | 77 | 94 | 1,178 | 121 | 194 | 13 | 9 | 0 | 1,515 |
| 2009 | 69 | 89 | 636 | 184 | 258 | 1 | 2 | 0 | 1,081 |
| 2010 | 74 | 97 | 843 | 190 | 155 | 0 | 4 | 0 | 1,192 |
| 2011 | 62 | 116 | 595 | 161 | 26 | 7 | 7 | 0 | 796 |
| 2012 | 69 | 89 | 840 | 176 | 138 | 4 | 2 | NA | 1,160 |
| Average | | | | | | | | | |
| 1981–2012 | 58 | 75 | 1,221 | 135 | 126 | 8 | 10 | 0 | 1,500 |
| 2002–2012 | 69 | 92 | 991 | 139 | 121 | 4 | 4 | 0 | 1,260 |
| 2008–2012 | 70 | 97 | 818 | 166 | 154 | 5 | 5 | 0 | 1,148 |
| 2013 | 58 | 108 | 817 | 172 | 181 | 19 | 0 | NA | 1,189 |

Source: ADF&G Division of Subsistence, Alaska Subsistence Fishery Database 2013 (ADF&G 2013).

Note: NA means not applicable.

Table 79.—Contribution of hatchery fish to the Fish Creek sockeye salmon escapement 2002–2012.

| Year | Sample % marked | Weir count |
|-----------|-----------------|------------|
| 2002 | 2% | 90,482 |
| 2003 | 12% | 91,952 |
| 2004 | 17% | 22,157 |
| 2005 | 55% | 14,215 |
| 2006 | 73% | 32,562 |
| 2007 | 71% | 27,948 |
| 2008 | 51% | 19,339 |
| 2009 | 36% | 83,480 |
| 2010 | 67% | 126,836 |
| 2011 | 69% | 66,678 |
| 2012 | 17% | 18,823 |
| Average | | |
| 2004–2012 | 51% | 45,782 |
| 2008–2012 | 48% | 63,031 |

Table 80.—Salmon harvests by educational fishery permit holders in Northern Cook Inlet Management Area, 1994–2013.

| Educational fishery permit holder | Year | Dates of operation | Salmon harvest (number of fish) | | | | | Total |
|-----------------------------------|------|--------------------|---------------------------------|------|---------|------|------|-------|
| | | | Chinook | Coho | Sockeye | Pink | Chum | |
| Knik Tribal Council | 1994 | ND | ND | ND | ND | ND | ND | 29 |
| | 1995 | ND | 5 | 1 | 21 | 0 | 1 | 28 |
| | 1996 | 17 Jun–20 Jul | 5 | 45 | 163 | 3 | 62 | 278 |
| | 1997 | 29 May–10 Aug | 19 | 34 | 153 | 0 | 15 | 221 |
| | 1998 | 14 May–15 Aug | 31 | 153 | 186 | 0 | 85 | 455 |
| | 1999 | 27 May–14 Aug | 42 | 120 | 177 | 0 | 55 | 394 |
| | 2000 | 26 May–06 Aug | 65 | 63 | 34 | 0 | 18 | 180 |
| | 2001 | 13 May–10 Aug | 32 | 34 | 71 | 0 | 0 | 137 |
| | 2002 | 20 May–08 Aug | 55 | 99 | 136 | 5 | 36 | 331 |
| | 2003 | 24 May–15 Aug | 34 | 87 | 654 | 3 | 45 | 823 |
| | 2004 | 15 May–06 Aug | 105 | 207 | 142 | 20 | 29 | 503 |
| | 2005 | 17 May–15 Aug | 25 | 80 | 200 | 9 | 16 | 330 |
| | 2006 | 15 May–30 Sep | 24 | 75 | 197 | 12 | 7 | 315 |
| | 2007 | | 19 | 75 | 7 | 0 | 16 | 117 |
| | 2008 | 15 May–19 Jul | 12 | 70 | 79 | 0 | 0 | 161 |
| | 2009 | 1 Jul–30 Sep | 0 | 79 | 66 | 1 | 8 | 154 |
| | 2010 | 6 Jul–24 Jul | 0 | 94 | 72 | 21 | 61 | 248 |
| | 2011 | 1 Jul–30 Sep | 0 | 8 | 61 | 1 | 0 | 70 |
| | 2012 | 10 Jul–12 Jul | 0 | 6 | 48 | 0 | 4 | 58 |
| | 2013 | 29-Jul | 0 | 31 | 26 | 4 | 52 | 113 |
| Average | | | | | | | | |
| 1994–2012 | | | 26 | 74 | 137 | 4 | 25 | 254 |
| 2008–2012 | | | 2 | 51 | 65 | 5 | 15 | 138 |
| Eklutna Village | 1994 | ND | ND | 7 | ND | ND | ND | 172 |
| | 1995 | ND | 14 | 37 | 55 | 6 | 42 | 154 |
| | 1996 | ND | ND | ND | ND | ND | ND | ND |
| | 1997 | 01 May–30 Sep | 7 | 14 | 39 | 16 | 7 | 83 |
| | 1998 | 01 May–30 Sep | 32 | 116 | 104 | 6 | 51 | 309 |
| | 1999 | 01 May–30 Sep | 11 | 25 | 80 | 3 | 20 | 139 |
| | 2000 | 01 May–30 Sep | 17 | 85 | 76 | 21 | 51 | 250 |
| | 2001 | 01 May–30 Sep | 58 | 95 | 52 | 56 | 34 | 295 |
| | 2002 | 01 May–30 Sep | 58 | 156 | 220 | 40 | 76 | 550 |
| | 2003 | 01 May–30 Sep | 69 | 49 | 160 | 14 | 21 | 313 |
| | 2004 | 01 May–30 Sep | 50 | 297 | 311 | 4 | 71 | 733 |
| | 2005 | 01 May–30 Sep | 72 | 242 | 166 | 8 | 29 | 517 |
| | 2006 | 01 May–30 Sep | 43 | 199 | 59 | 11 | 7 | 319 |
| | 2007 | | | | | | | 0 |
| | 2008 | | 16 | 178 | 19 | 3 | 0 | 216 |
| | 2009 | 1 Jul–30 Sep | 0 | 221 | 135 | 20 | 23 | 399 |
| | 2010 | | | | | | | |
| | 2011 | 1 Jul–30 Sep | 0 | 282 | 343 | 32 | 47 | 704 |
| | 2012 | 1 Jul–30 Sep | 0 | 242 | 218 | 10 | 63 | 533 |
| | 2013 | 1 Jul–30 Sep | 0 | 52 | 124 | 2 | 18 | 196 |
| Average | | | | | | | | |
| 1994–2012 | | | 30 | 140 | 136 | 17 | 36 | 334 |
| 2008–2012 | | | 4 | 231 | 179 | 16 | 33 | 463 |

-continued-

Table 80.–Page 2 of 2.

| Educational fishery permit holder | Year | Dates of operation | Salmon harvest (number of fish) | | | | | |
|-----------------------------------|-------------------|--|---------------------------------|------|---------|------|------|-------|
| | | | Chinook | Coho | Sockeye | Pink | Chum | Total |
| Tyonek Village | | | | | | | | |
| | 1998 | 12 Aug–14 Aug | 0 | 41 | 11 | 3 | 1 | 56 |
| | 1999 | 07 Jul–10 Jul | 0 | 0 | 100 | 0 | 0 | 100 |
| | 2000 | 06 Jul–09 Jul | 0 | 0 | 97 | 0 | 0 | 97 |
| | 2008 | 31 May–1 Jun | 2 | 0 | 0 | 0 | 0 | 2 |
| | 2009 | 4 Jun–12 Jun | 3 | 0 | 0 | 0 | 0 | 3 |
| | 2010 | 21 Jun–23 Jun | 0 | 0 | 1 | 0 | 0 | 1 |
| | 2011 | No permit - low Chinook salmon abundance | | | | | | |
| | 2012 | No permit - low Chinook salmon abundance | | | | | | |
| | 2013 | No permit - low Chinook salmon abundance | | | | | | |
| | Average 1998–2010 | | 1 | 7 | 35 | 1 | 0 | 43 |
| Big Lake | | | | | | | | |
| Cultural Outreach | 2005 | 15 May–30 Sep | 61 | 99 | 98 | 56 | 34 | 348 |
| | 2006 | 07 Jun–31 Jul | 8 | 12 | 68 | 1 | 3 | 92 |
| | 2007 | | 19 | 46 | 7 | 0 | 16 | 88 |
| | 2008 | 19 Jun–2 Aug | 20 | 62 | 9 | 0 | 6 | 97 |
| | 2009 | 7 Jul–2 Aug | 0 | 70 | 35 | 4 | 1 | 110 |
| | 2010 | 22 Jul–11 Aug | 0 | 100 | 94 | 6 | 16 | 216 |
| | 2011 | 3-Aug | 0 | 6 | 4 | 3 | 3 | 16 |
| | 2012 | Did not fish | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2013 | 27 Jul–7 Aug | 0 | 9 | 21 | 0 | 0 | 30 |
| | Average 2005–2012 | | 14 | 49 | 39 | 9 | 10 | 121 |
| McLaughlin | | | | | | | | |
| | 2012 | Permit terminated to conserve coho | | | | | | |
| | 2013 | Did not fish | | | | | | |
| Intertribal | | | | | | | | |
| Native Leadership | 2006 | 15 May–30 Sep | 12 | 95 | 135 | 85 | 21 | 348 |

Source: Permit data returned to ADF&G

Note: ND means no attempt was made to collect data.

FIGURES

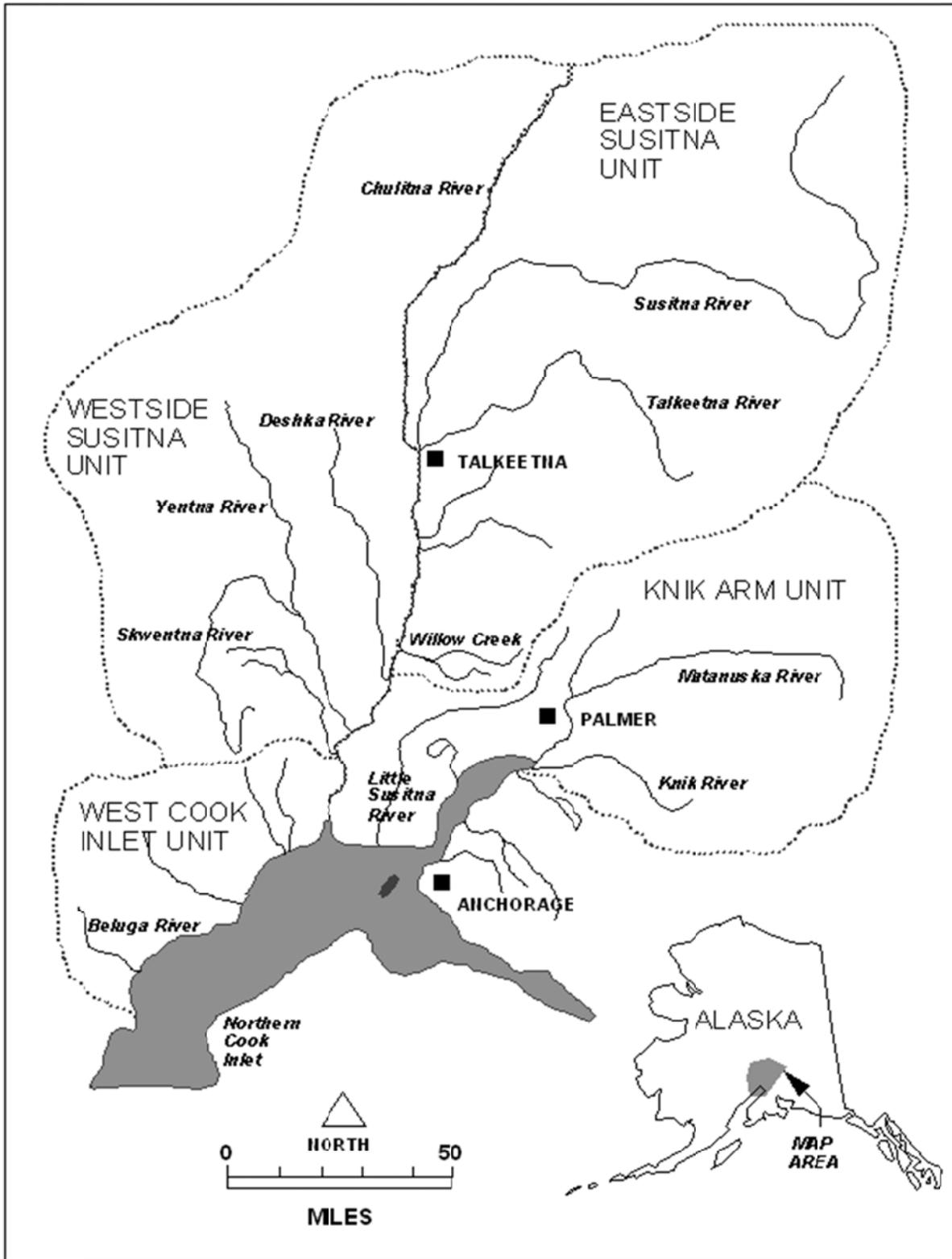


Figure 1.—Northern Cook Inlet sport fish management area (NCIMA).

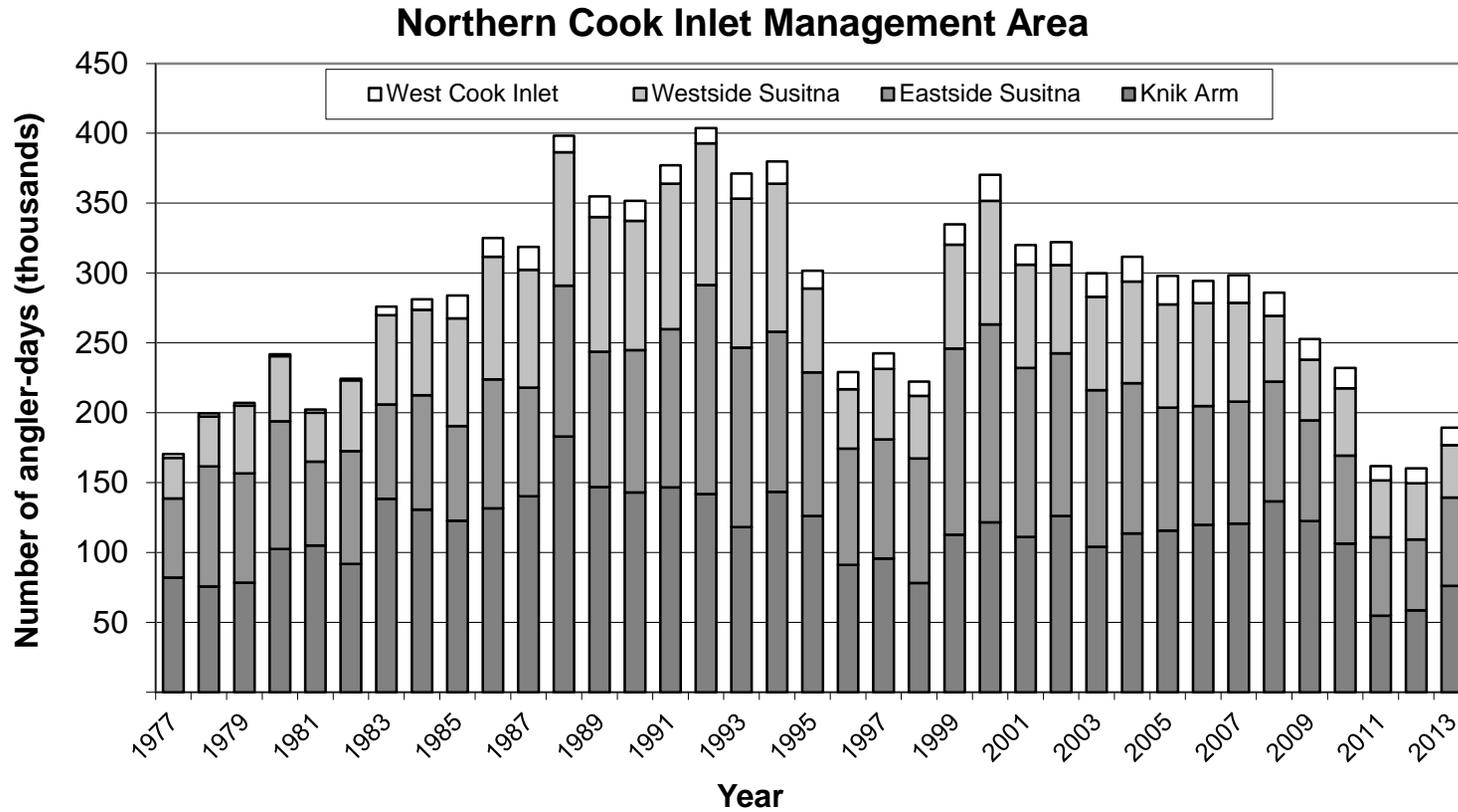


Figure 2.—Angler-days of sport fishing effort expended by sport anglers fishing Northern Cook Inlet Management Area waters, 1977–2013.

Source: Mills (1979, 1980, 1981a, 1981b, 1982–1994); Howe et al. (1995, 1996); Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Knik Arm Management Unit

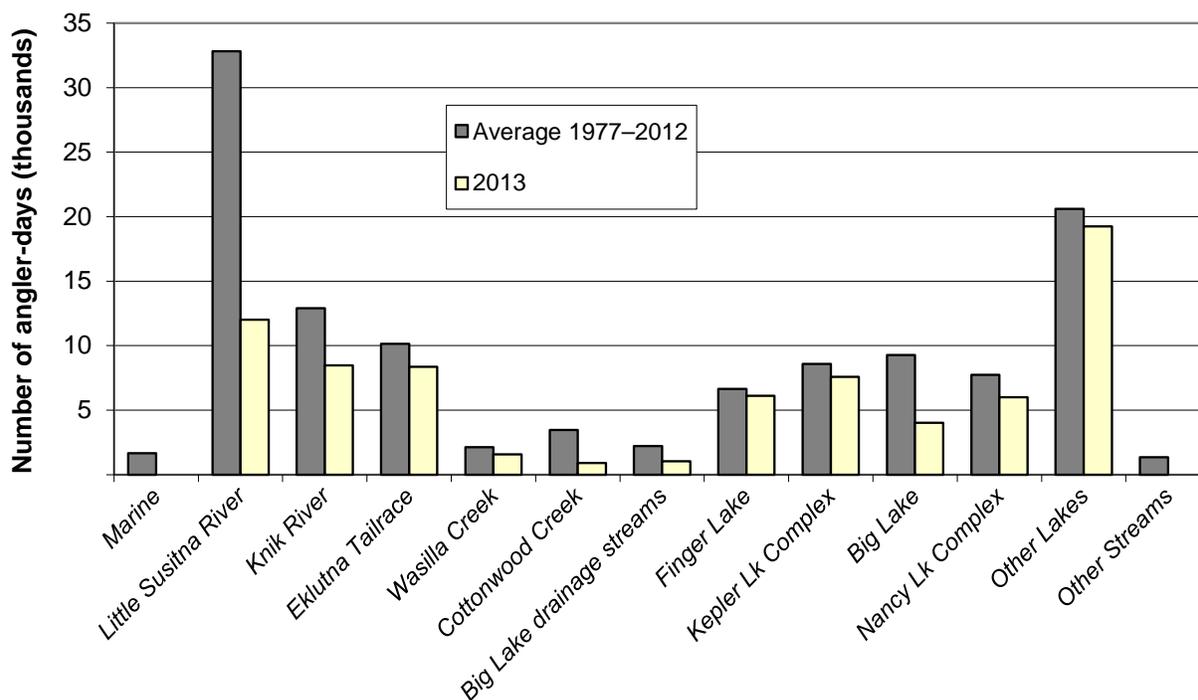


Figure 3.—Comparison of annual sport fishing effort (number of angler-days expended per year) for 2013 versus the average for 1977–2013 at sites in the Knik Arm Management Unit.

Source: Mills (1979, 1980, 1981a, 1981b, 1982–1994); Howe et al. (1995, 1996); Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Eastside Susitna Management Unit

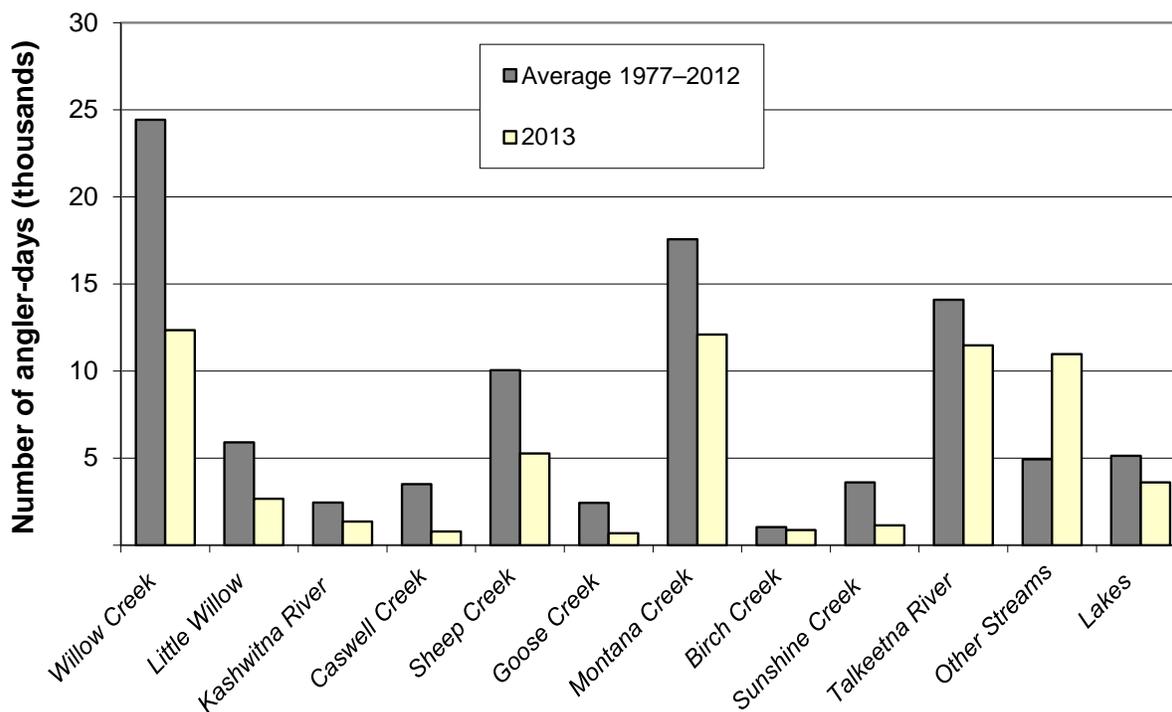


Figure 4.—Comparison of annual sport fishing effort (number of angler-days expended per year) for 2013 versus the average for 1977–2012 at sites in the Eastside Susitna River Management Unit.

Source: Mills (1979, 1980, 1981a, 1981b, 1982–1994); Howe et al. (1995, 1996); Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Westside Susitna Management Unit

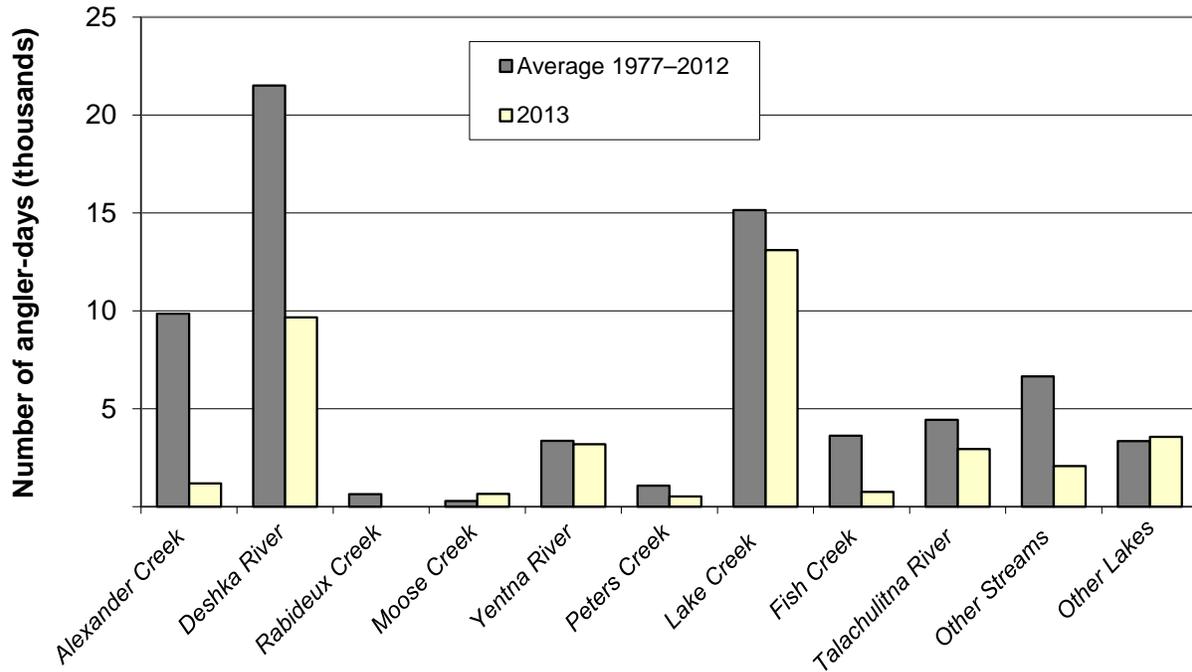


Figure 5.—Comparison of annual sport fishing effort (number of angler-days expended per year) for 2013 versus the average for 1977–2012 at sites in the Westside Susitna River Management Unit.

Source: Mills (1979, 1980, 1981a, 1981b, 1982–1994); Howe et al. (1995, 1996); Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

West Cook Inlet Management Unit

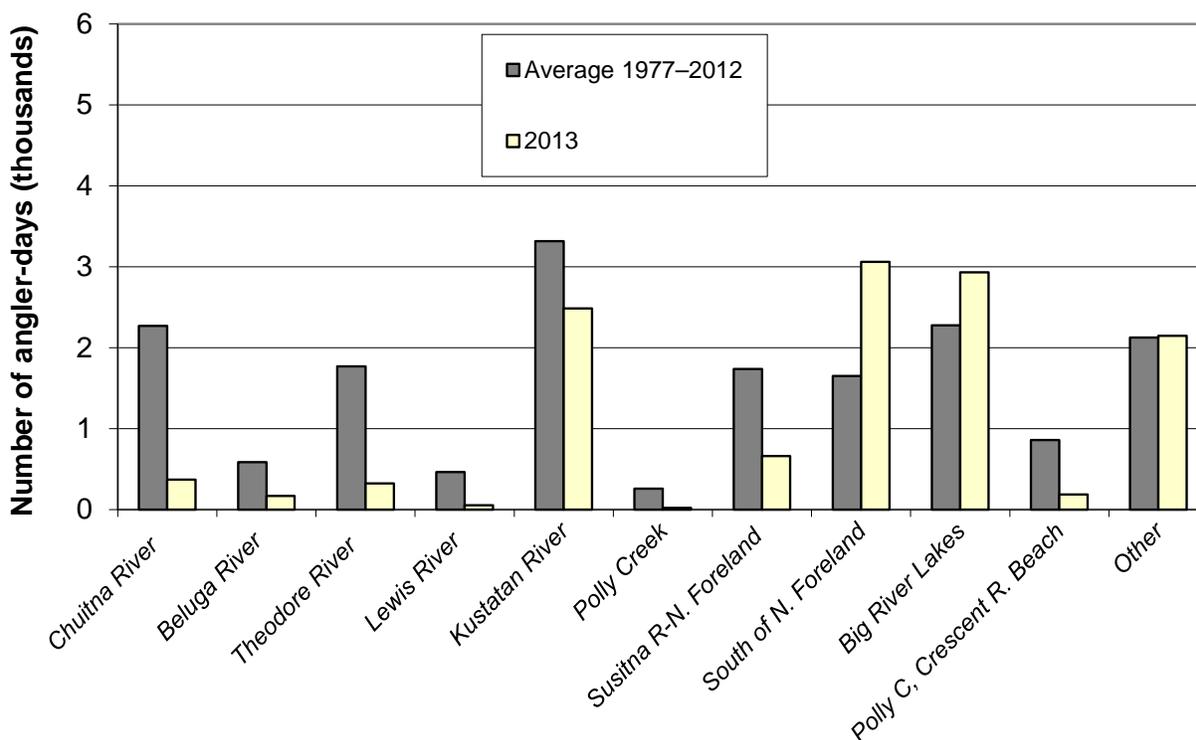


Figure 6.—Comparison of annual sport fishing effort (number of angler-days per year) for 2013 versus the average for 1977–2012 at sites in West Cook Inlet Management Unit.

Source: Mills (1979, 1980, 1981a, 1981b, 1982–1994); Howe et al. (1995, 1996); Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

Note: Big River Lakes includes Big River drainage, including Wolverine Creek.

Northern Cook Inlet Management Area

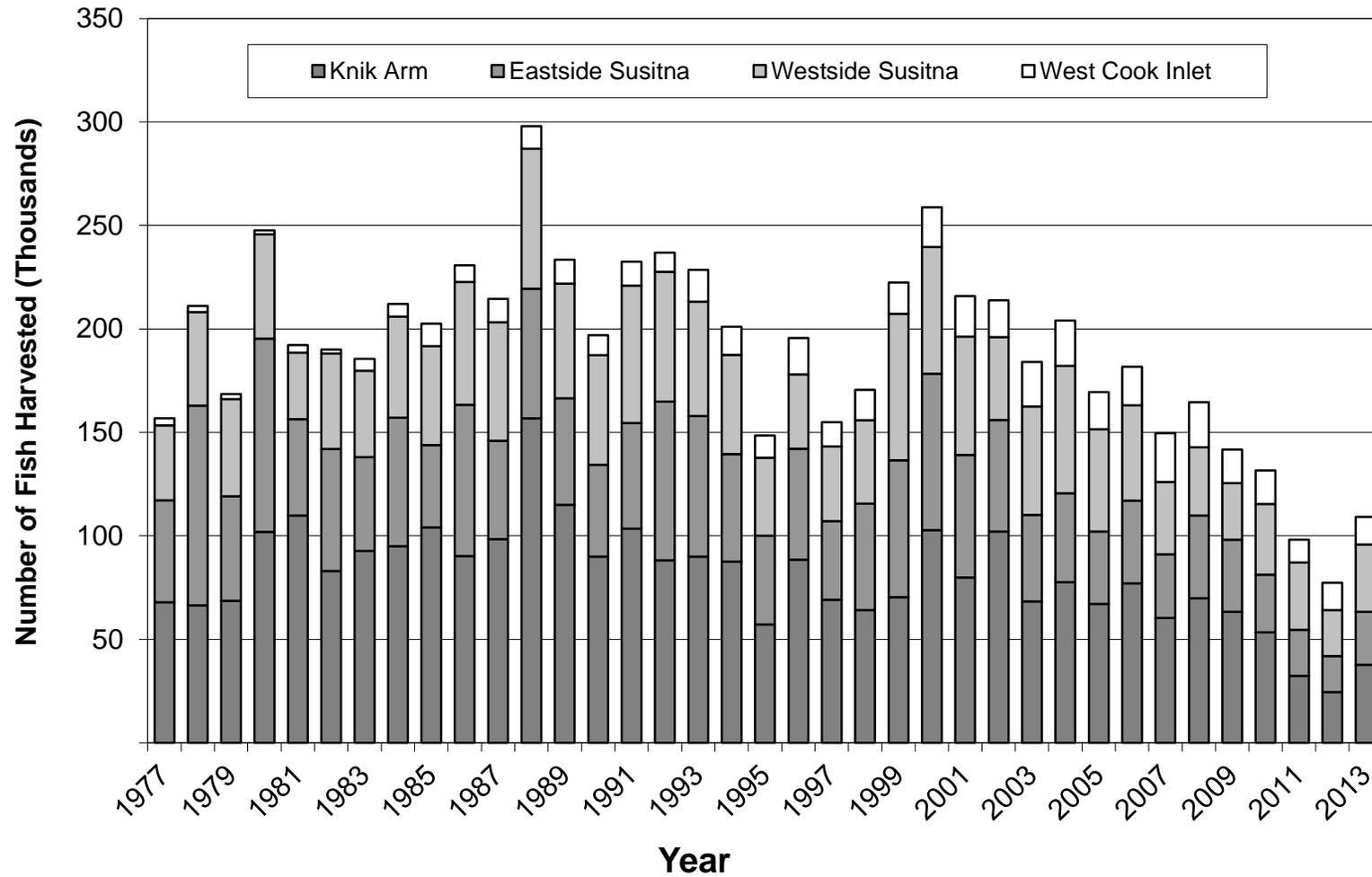


Figure 7.—Northern Cook Inlet Management Area sport harvest 1977–2013.

Source: Mills (1979, 1980, 1981a, 1981b, 1982–1994); Howe et al. (1995, 1996); Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

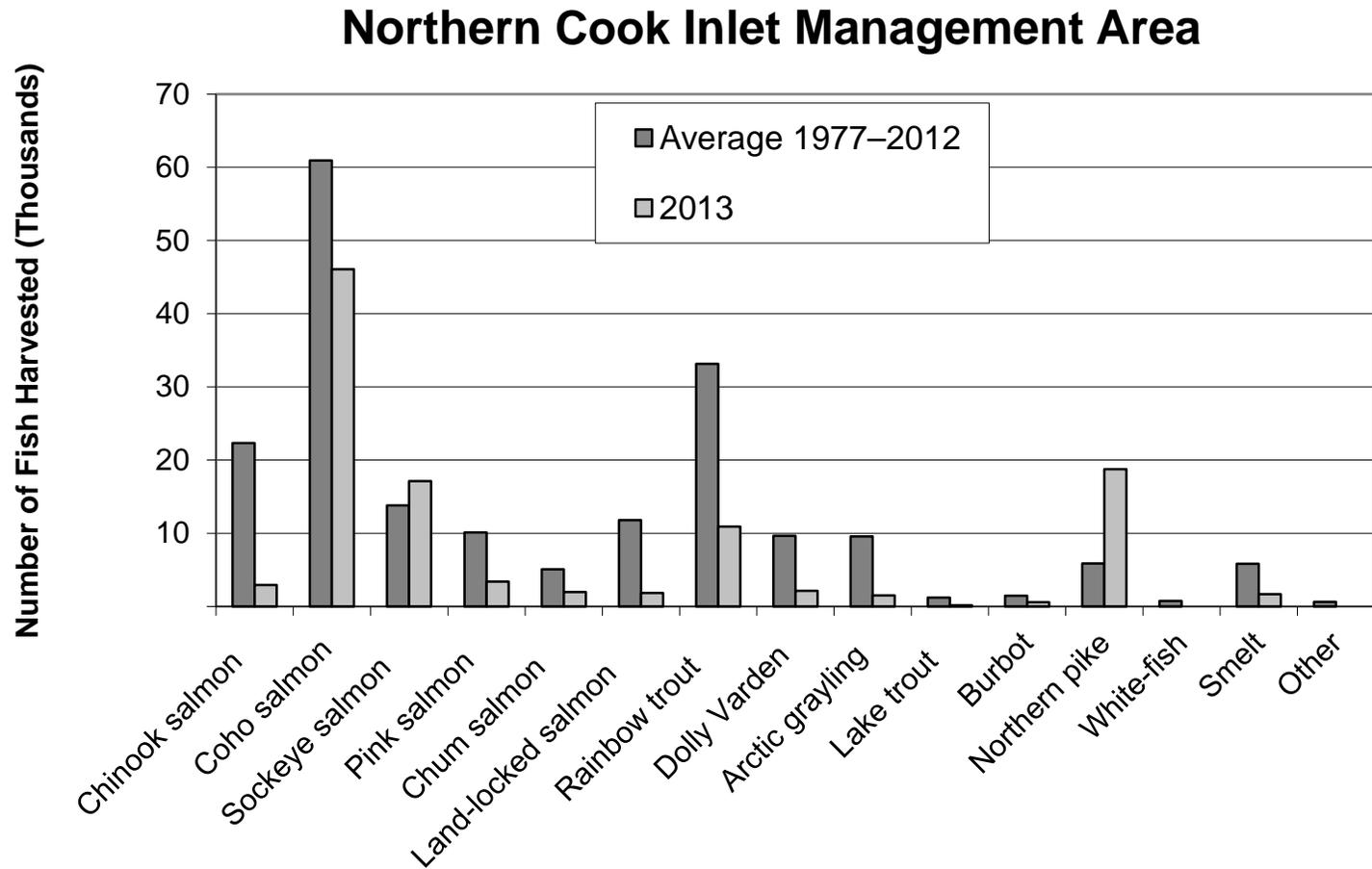


Figure 8.—Northern Cook Inlet Management Area sport harvest by species, comparison of 1977–2012 average harvest versus 2013 harvest.

Source: Mills (1979, 1980, 1981a, 1981b, 1982–1994); Howe et al. (1995, 1996); Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Northern Cook Inlet Management Area 2001–2013

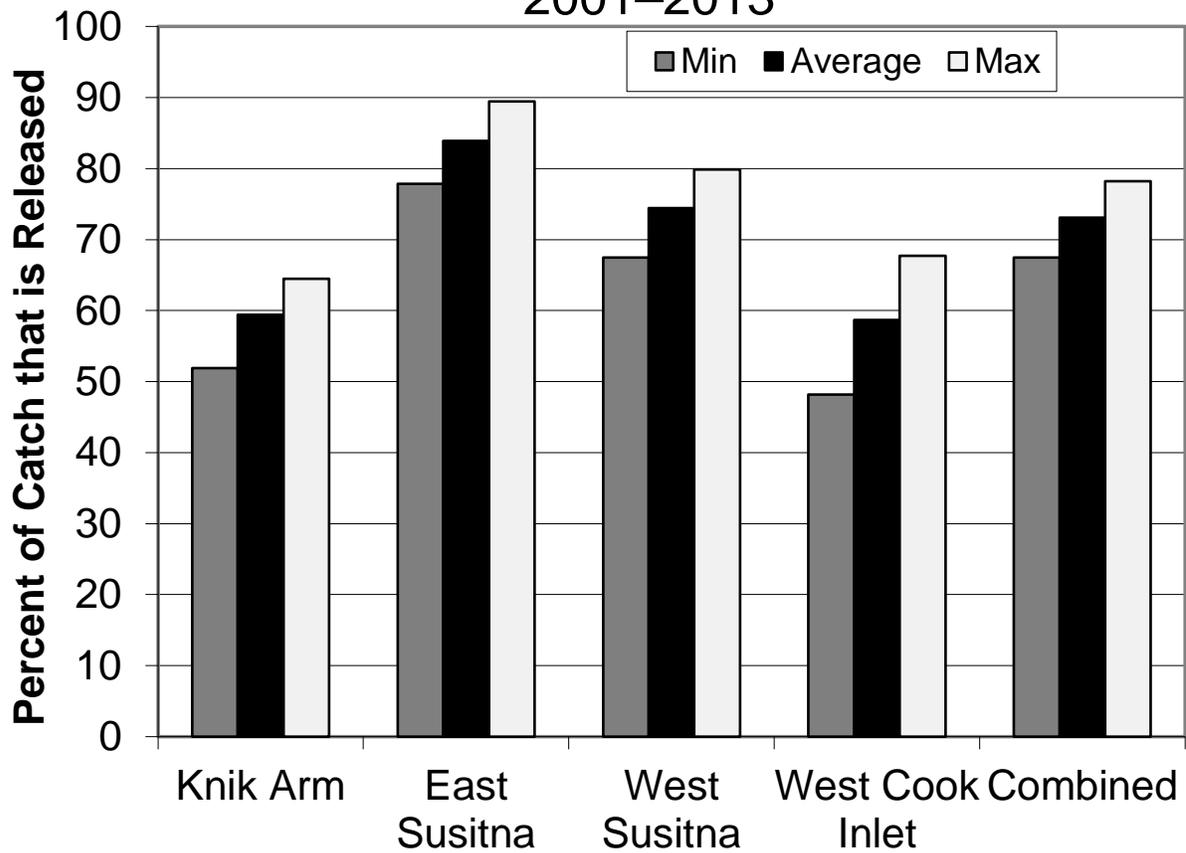


Figure 9.—Percent of sport catch released of all species from the Northern Cook Inlet Management Area by management unit, 2001–2013.

Source: Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

West Cook Inlet Area 2006–2013

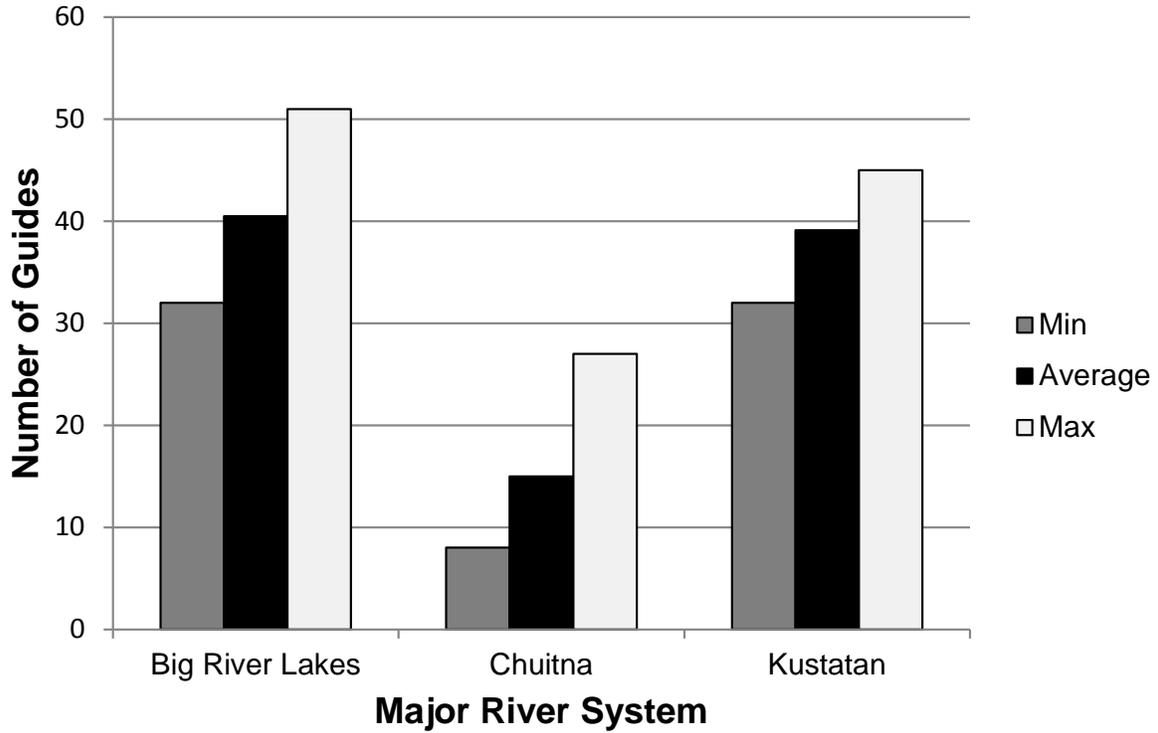


Figure 10.—Number of guides fishing major systems within the West Cook Inlet Management Unit., 2006–2013.

Source: Freshwater Logbook Database. Alaska Department of Fish and Game, Division of Sport Fish. 2006 to present. (Accessed September 3, 2016). [URL not publicly available as some information is confidential. Contact Research and Technical Services for data requests.] See also Sigurdsson and Powers (2009–2014).

NCIMA 2006–2013 Chinook Salmon

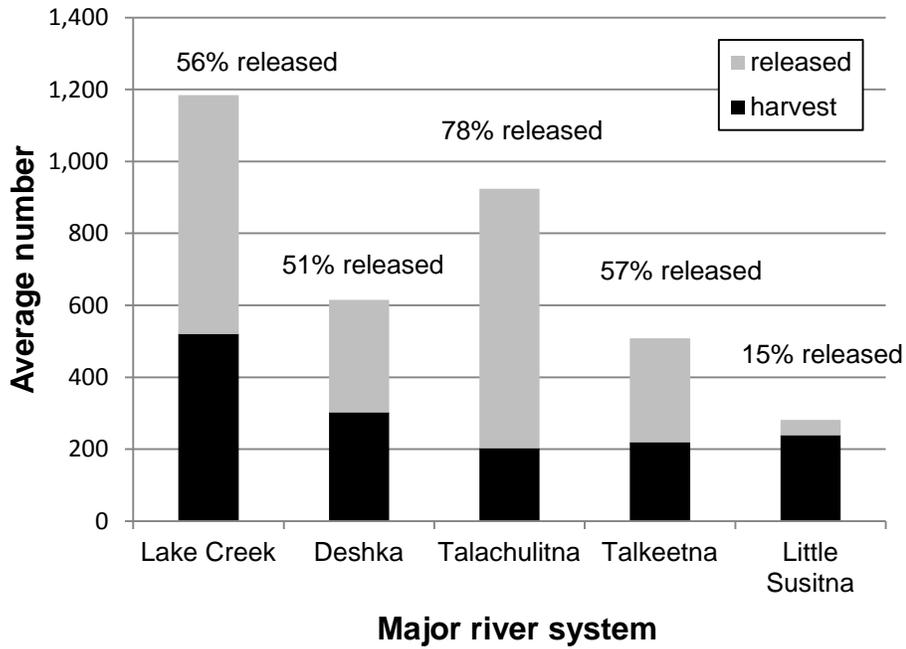


Figure 11.—Average guided catch divided into harvest and number released of Chinook salmon caught in the NCIMA, 2006–2013.

Source: Freshwater Logbook Database. Alaska Department of Fish and Game, Division of Sport Fish. 2006 to present. (Accessed September 3, 2016). [URL not publicly available as some information is confidential. Contact Research and Technical Services for data requests.] See also Sigurdsson and Powers (2009–2014).

NCIMA 2006–2013 Coho Salmon

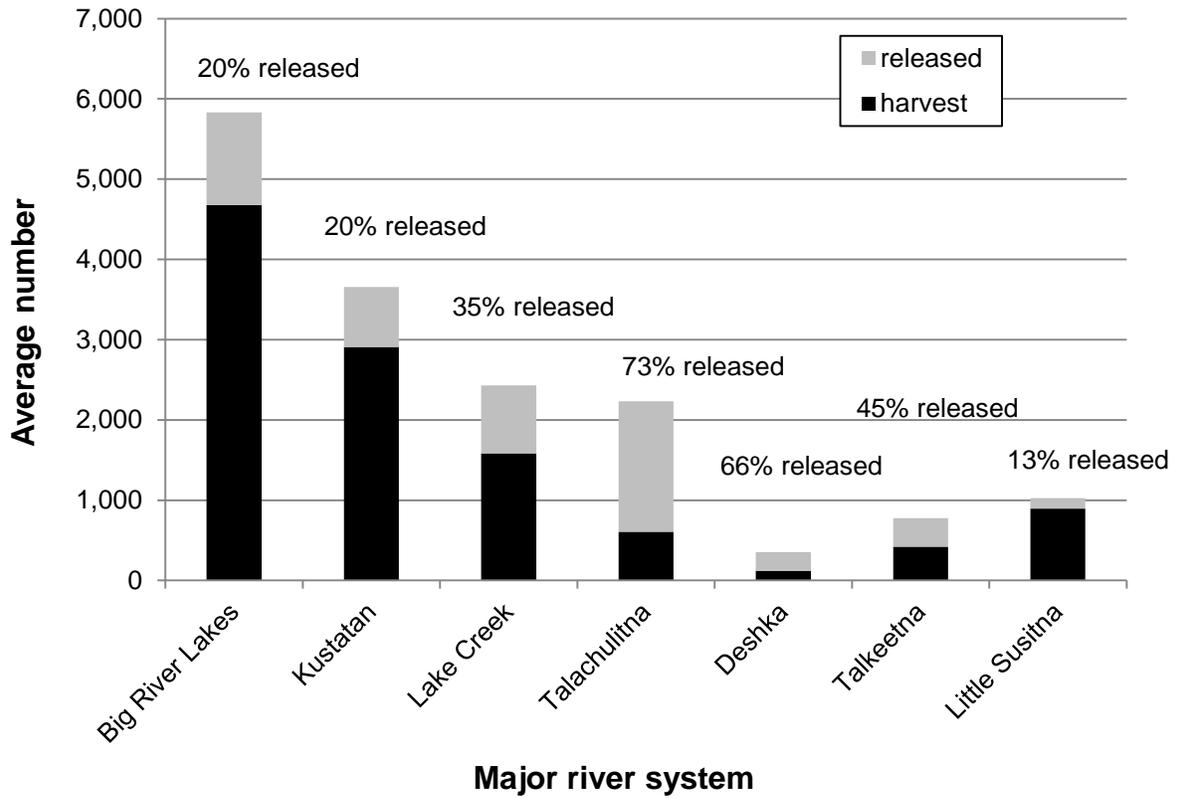


Figure 12.—Average guided harvest and average number released of coho salmon caught in the NCIMA, 2006–2013.

Source: Freshwater Logbook Database. Alaska Department of Fish and Game, Division of Sport Fish. 2006 to present. (Accessed September 3, 2016). [URL not publicly available as some information is confidential. Contact Research and Technical Services for data requests.] See also Sigurdsson and Powers (2009–2014).

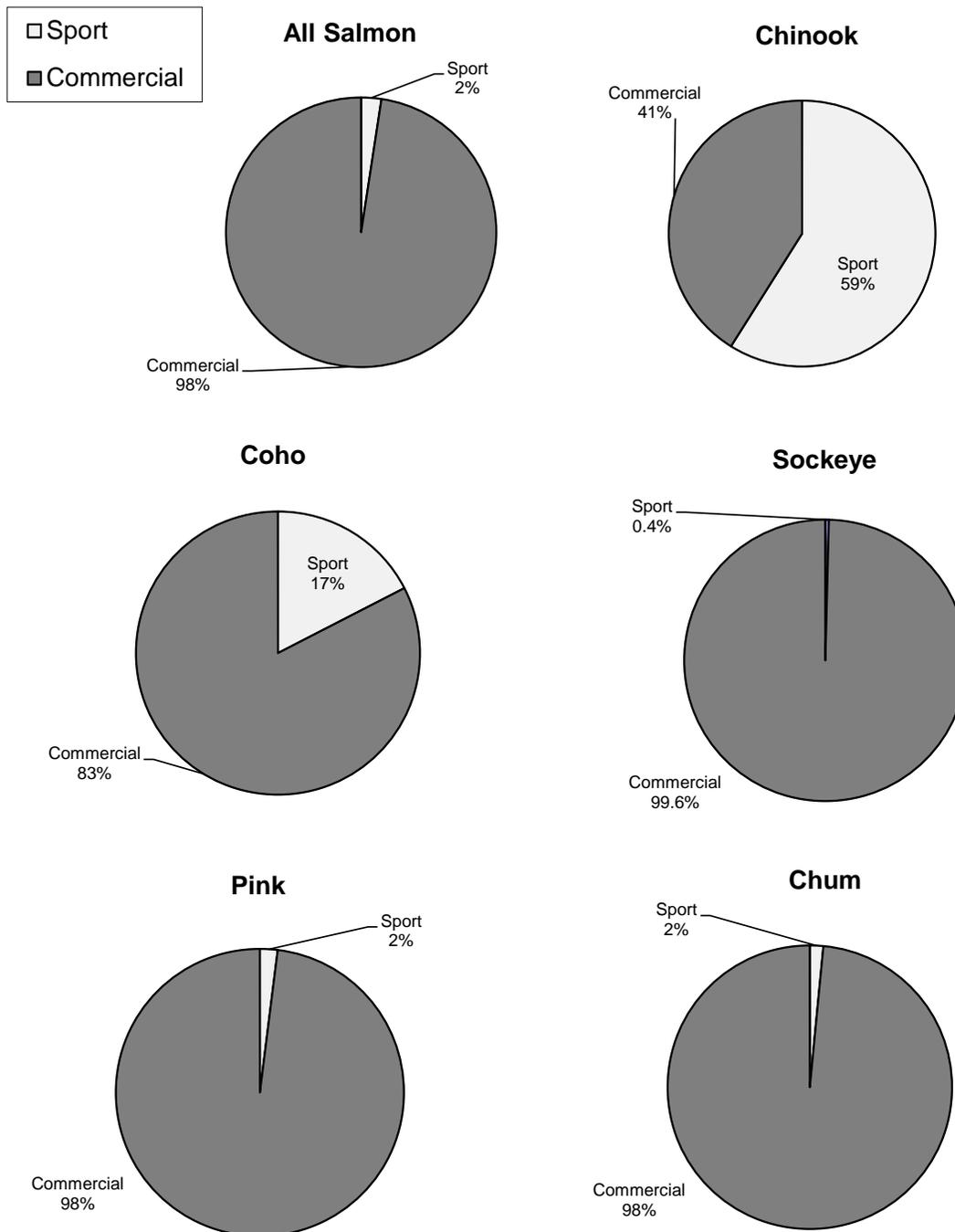


Figure 13.—Percentage of average total harvest (1983–2013) for Northern Cook Inlet Management Area sport fisheries versus Upper Cook Inlet commercial fisheries by species.

Source: Commercial from Shields and Dupuis (2013). Sport fish from Mills (1984–1994); Howe et al. (1995, 1996); Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

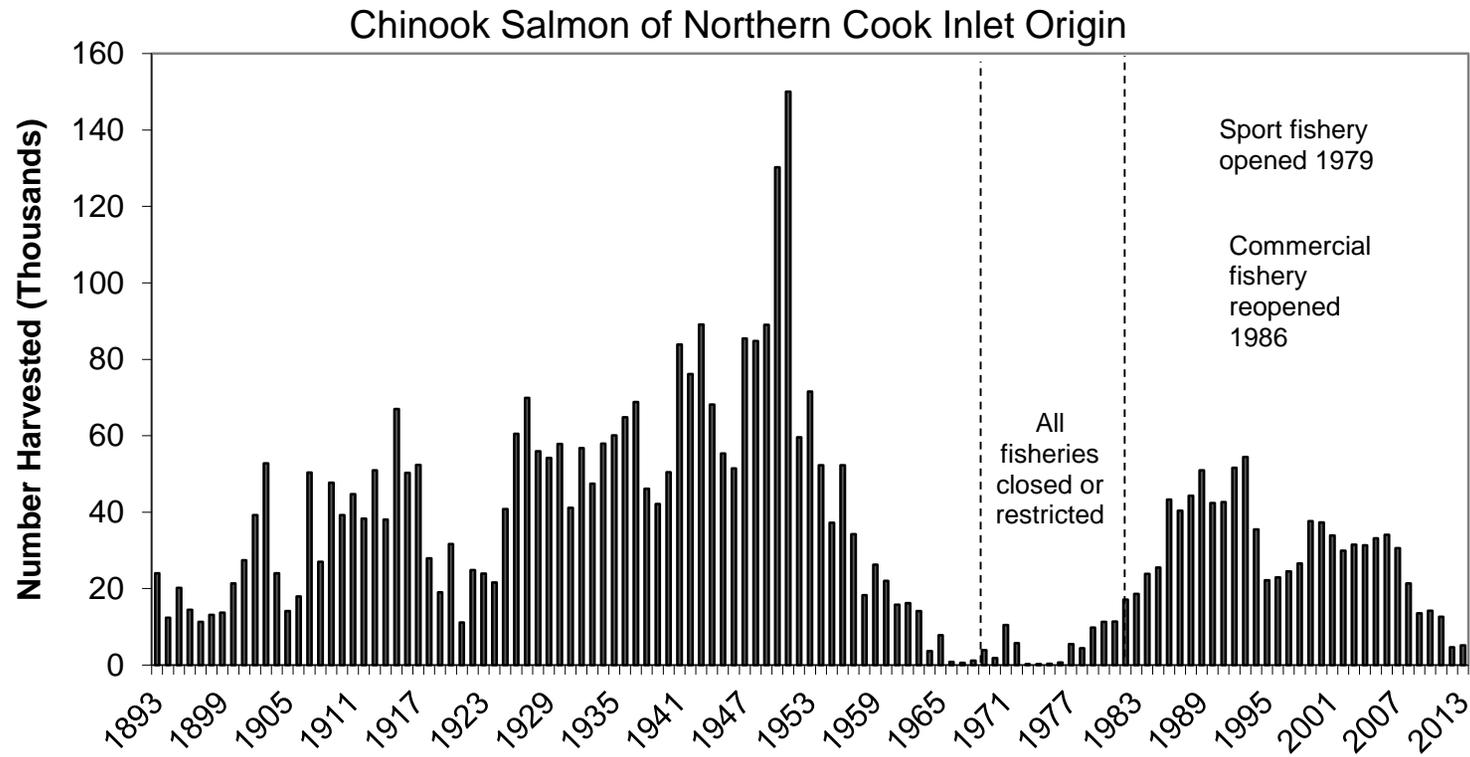


Figure 14.—Estimated harvests of Chinook salmon of Northern Cook Inlet origin by all user groups, 1893–2013.

Source: SWHS for the Division of Sport Fish, data archived with the Division of Commercial Fisheries and the Division of Subsistence.

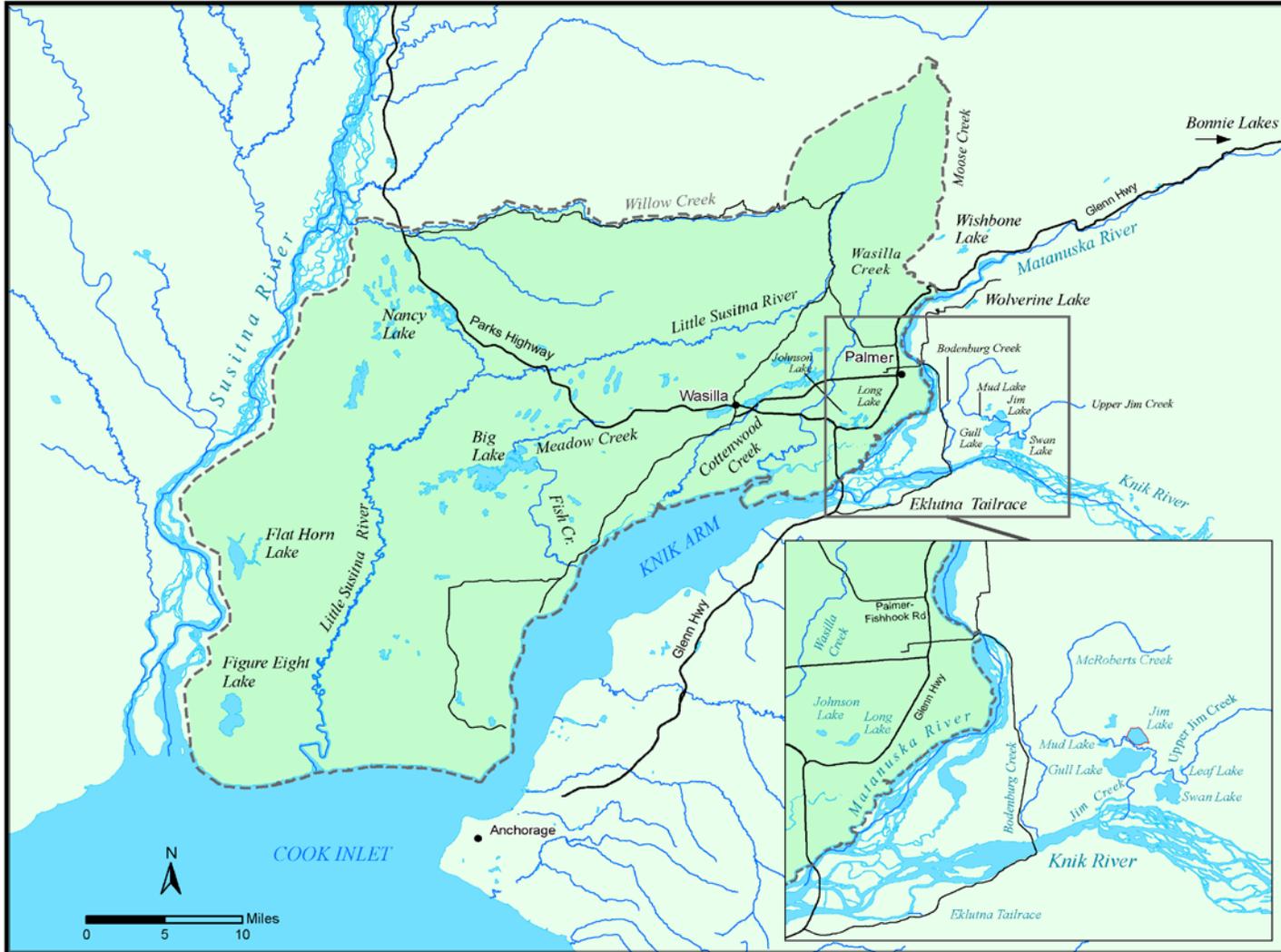


Figure 15.—Map showing the boundary of the Knik Arm Management Unit and the freshwater drainages therein.

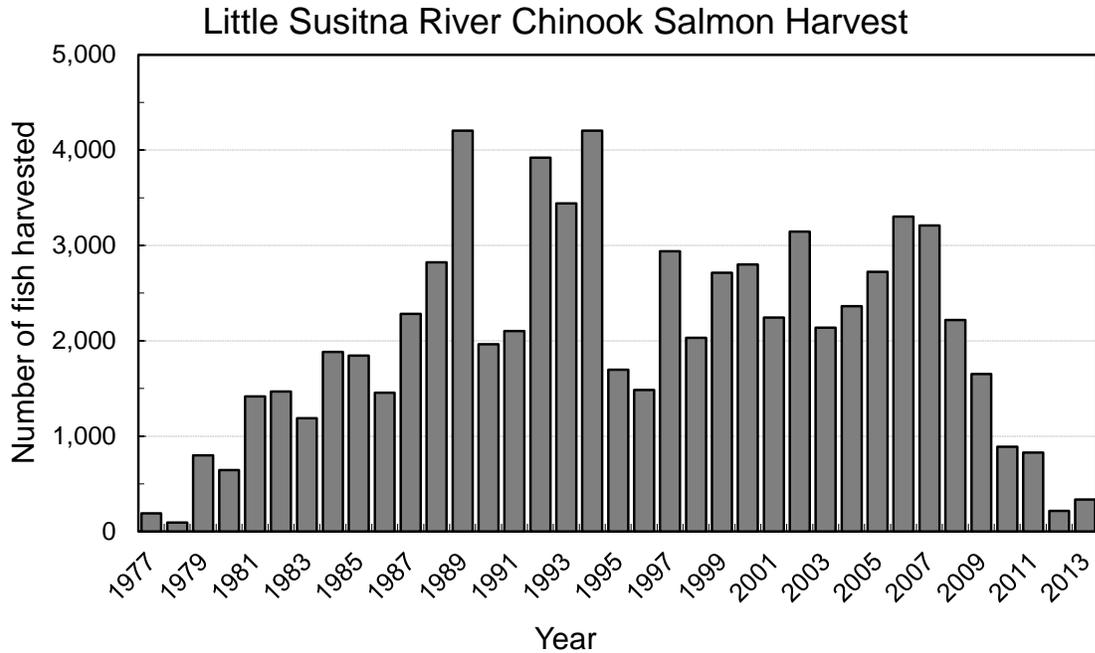


Figure 16.—Sport harvest of Chinook salmon from Little Susitna River, 1977–2013.

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

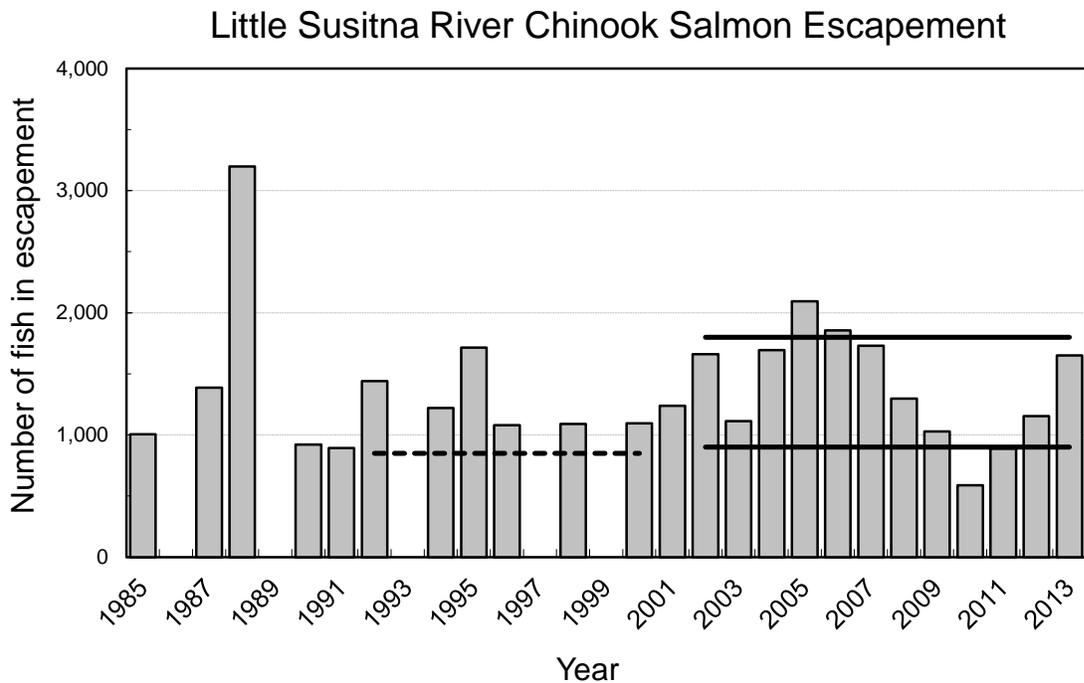


Figure 17.—Estimated escapement of Chinook salmon in the Little Susitna River with escapement goal range, 1985–2013.

Source: ADF&G staff aerial surveys.

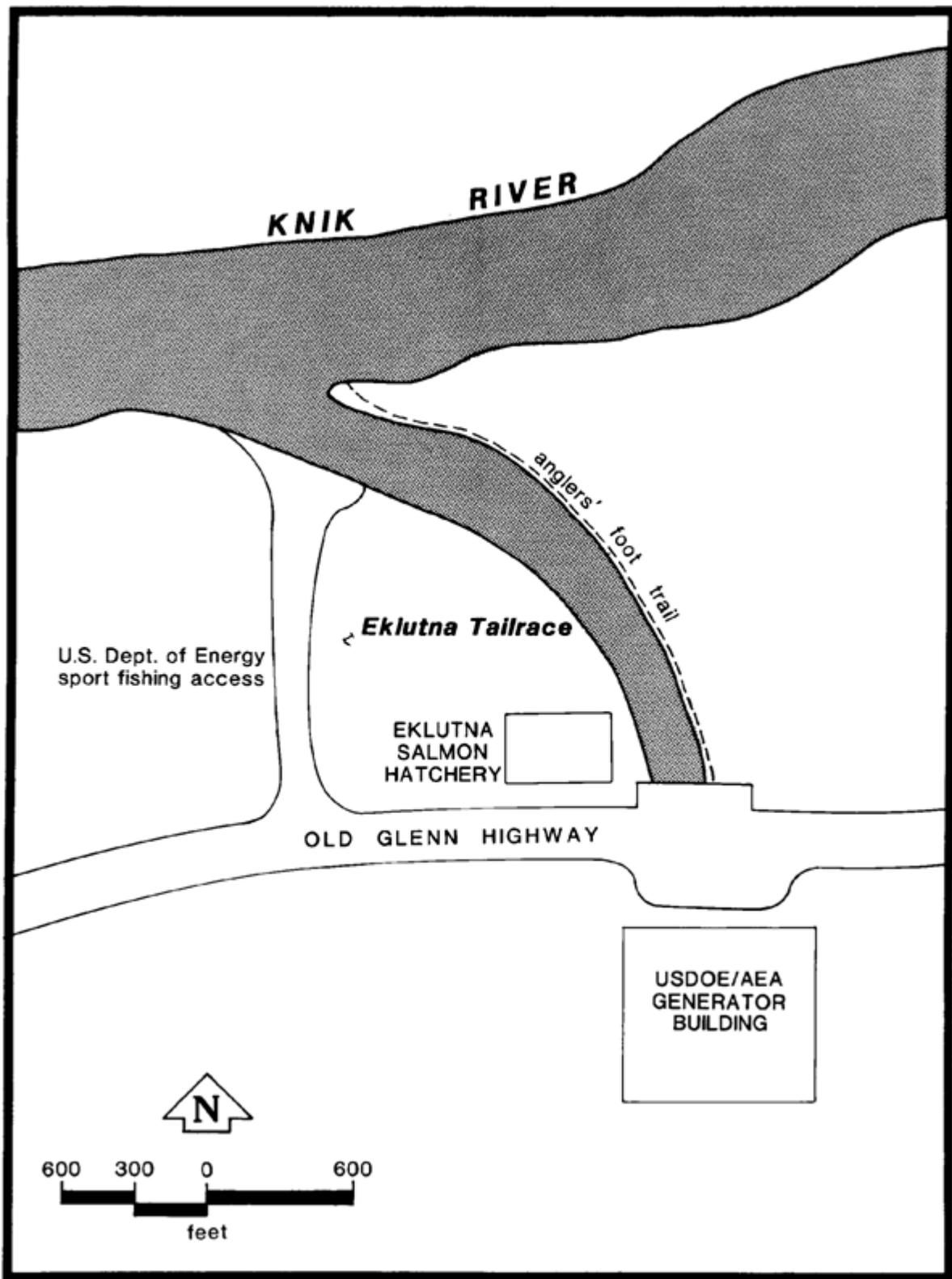


Figure 18.—Eklutna Power Plant tailrace, part of the Knik Arm Management Unit.

UNIT 2

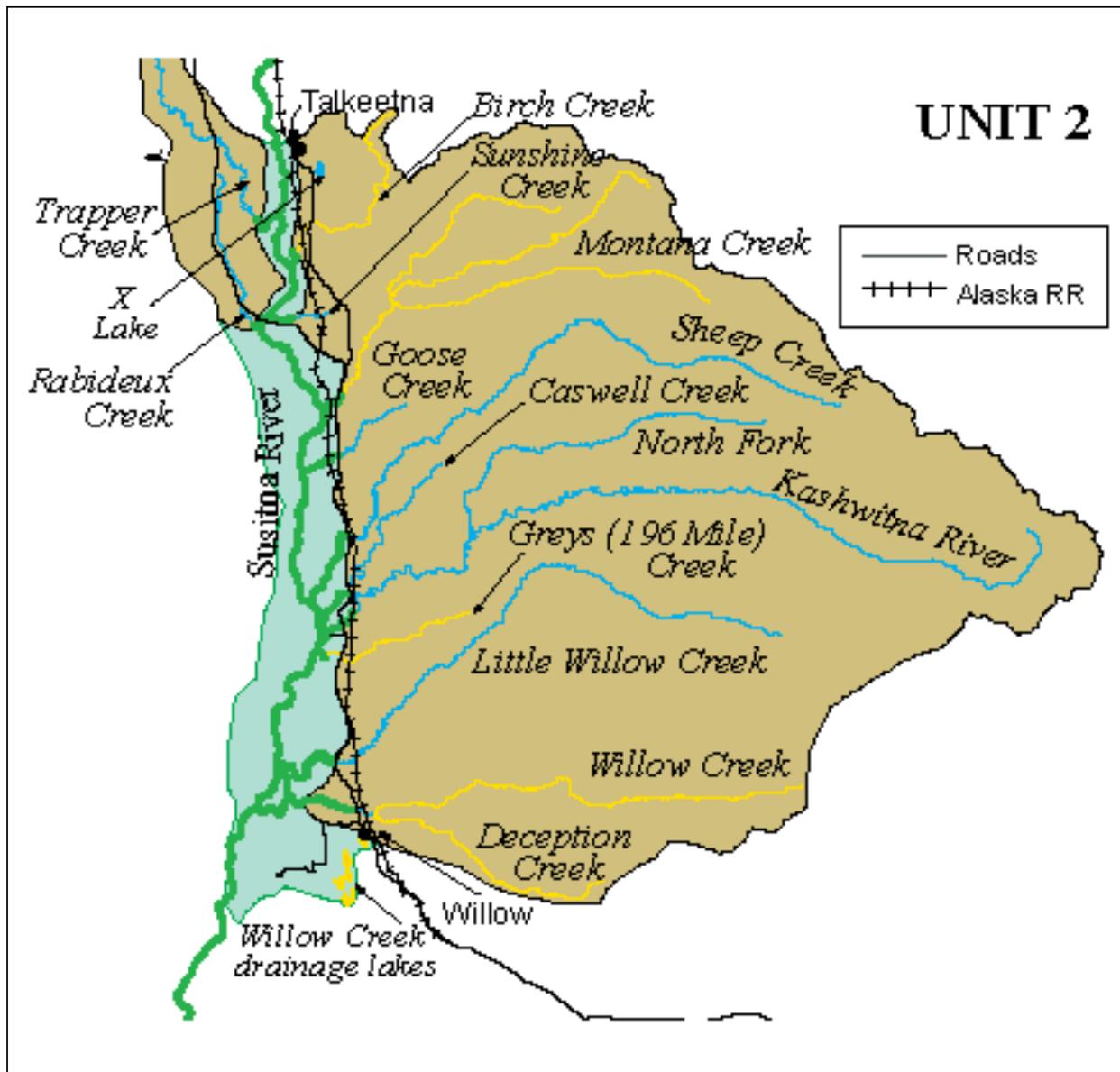


Figure 19.—Susitna River drainage from its confluence with the Deshka River upstream to its confluence with the Talkeetna River.

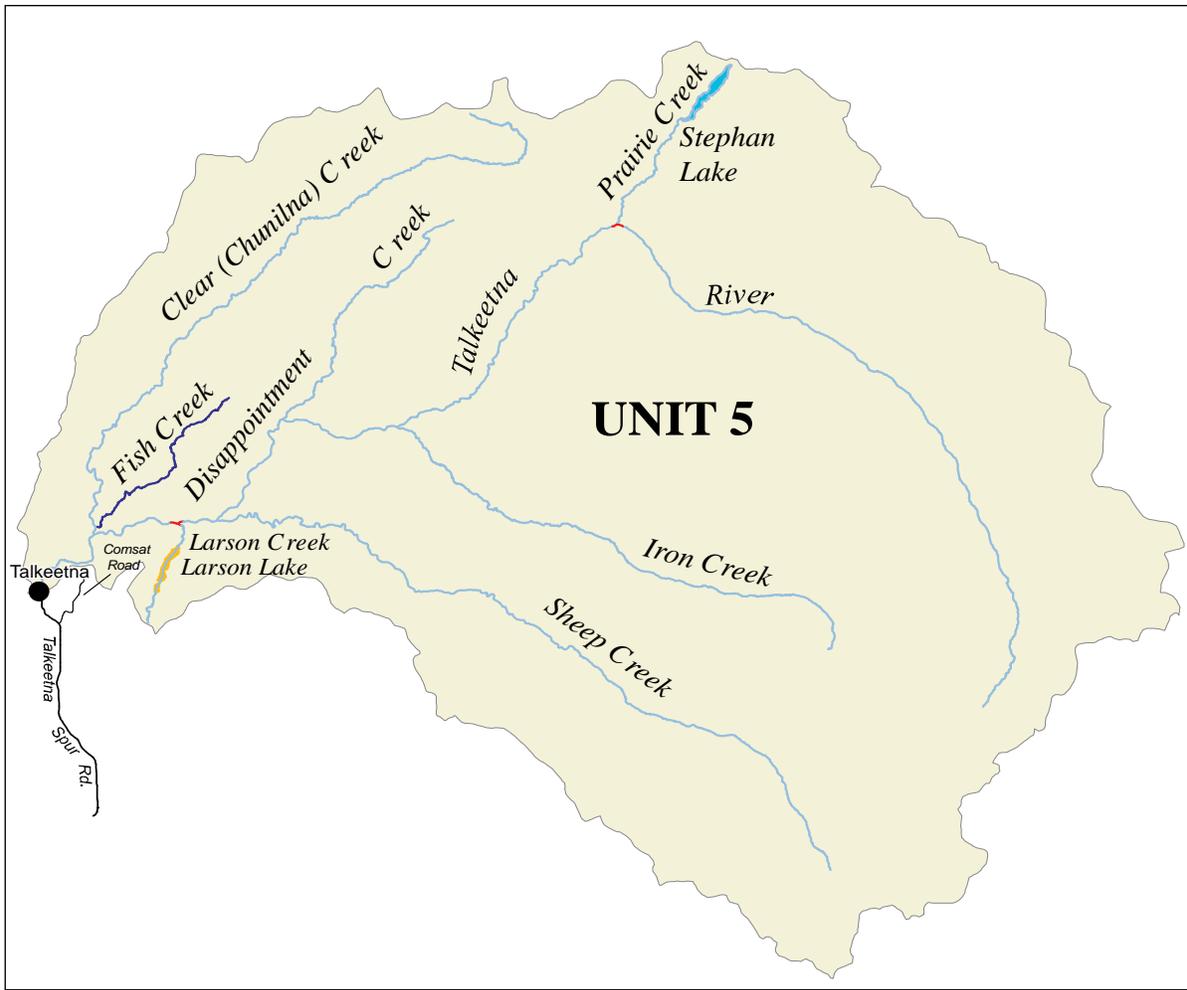


Figure 20.—Flowing waters, lakes, and ponds of the Talkeetna River drainage.

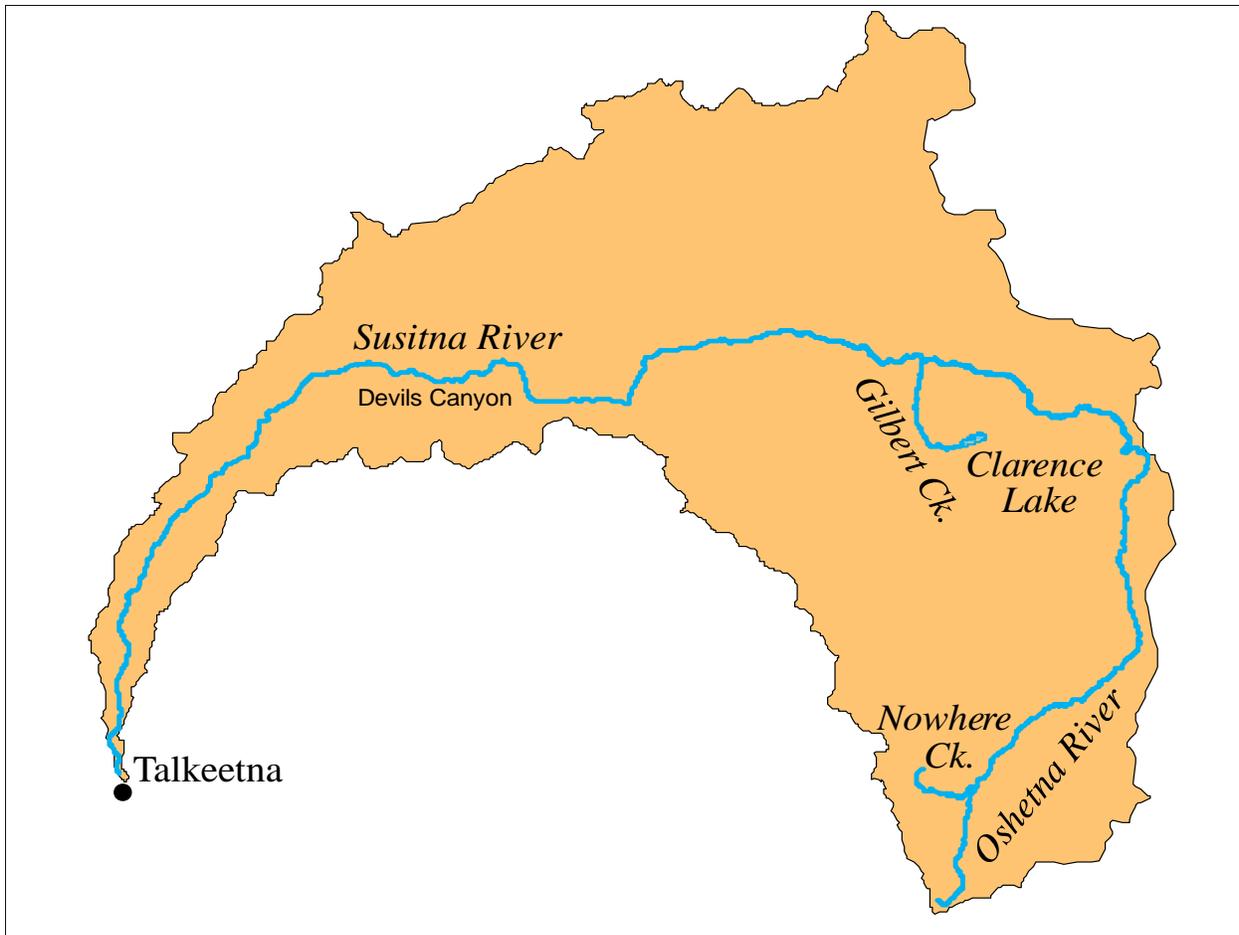


Figure 21.—Upper Susitna River area (Talkeetna to Devil’s Canyon), and including the Oshetna River.

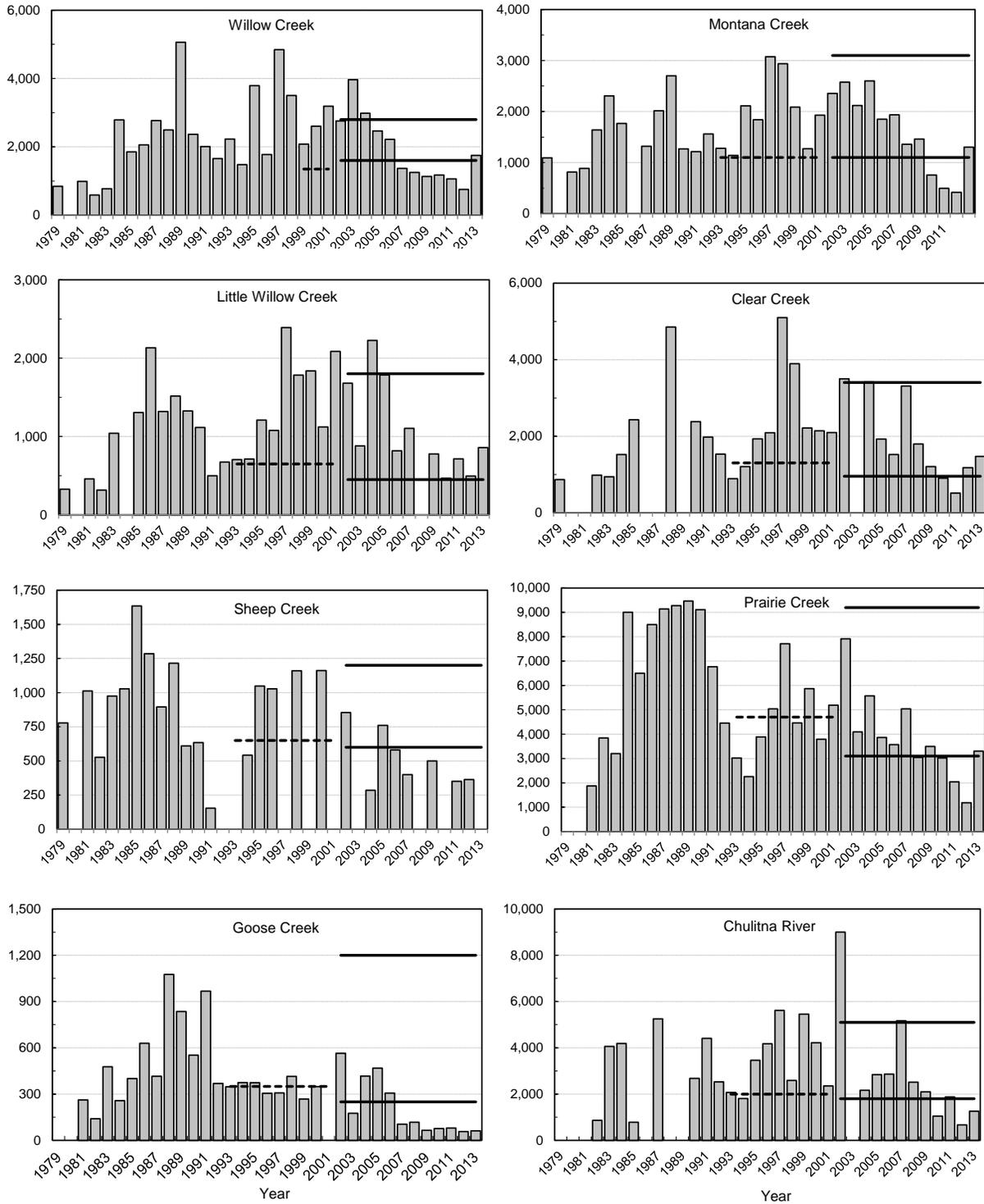


Figure 22.—Chinook salmon escapements at Eastside Susitna River tributaries and Chulitna River, 1979–2013.

Source: ADF&G staff surveys.

Note: Chinook salmon escapements (number of fish) are shown on the y-axes (scales differ between sites). The dashed line is the biological escapement goal; solid lines are the sustainable escapement goal range.

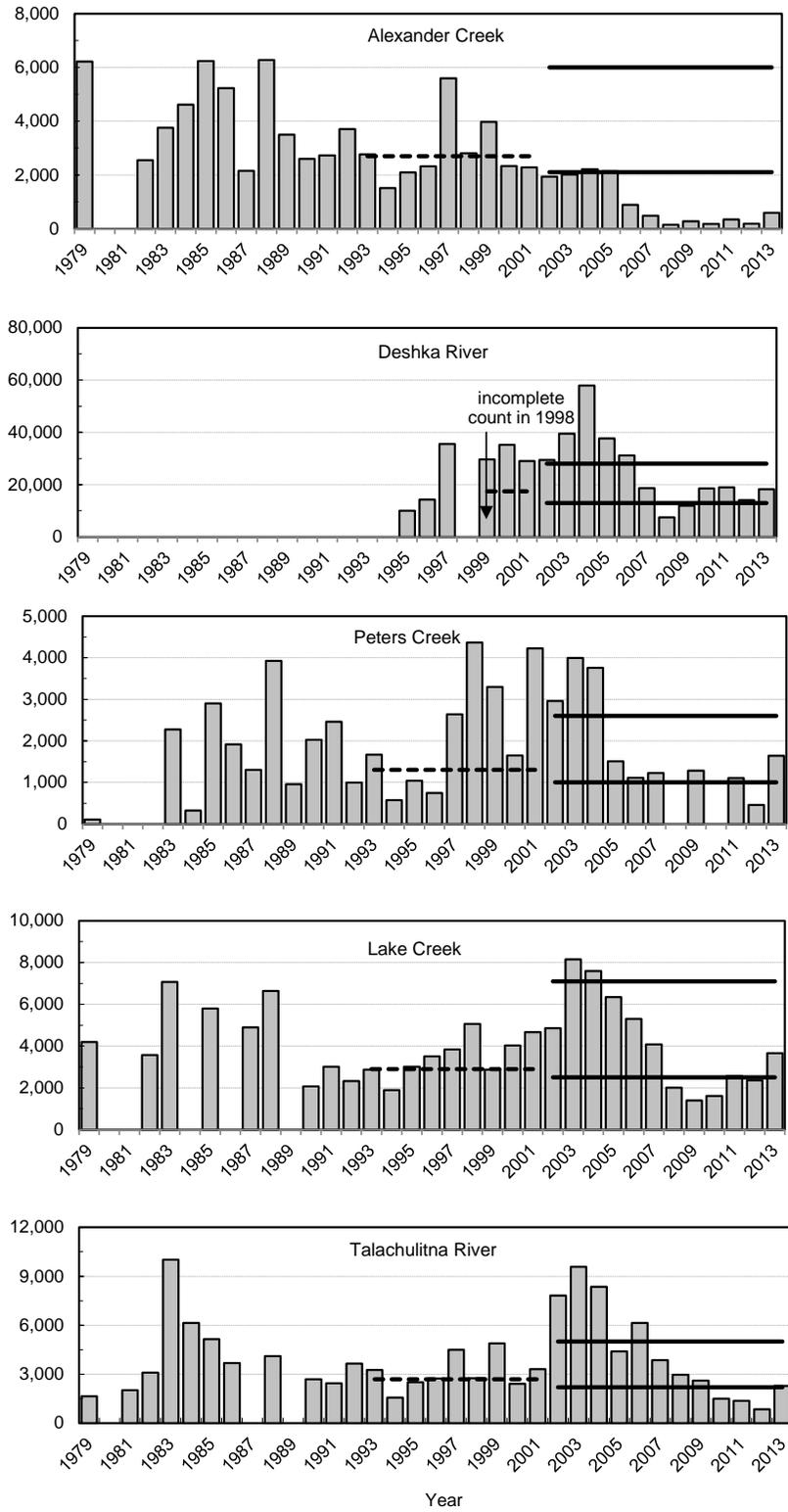


Figure 23.—Chinook salmon escapements at Westside Susitna River tributaries, 1979–2013.

Note: Chinook salmon escapements (number of fish) are shown on the y-axes (scales differ between sites). The dashed line is the biological escapement goal; solid lines are the sustainable escapement goal range.

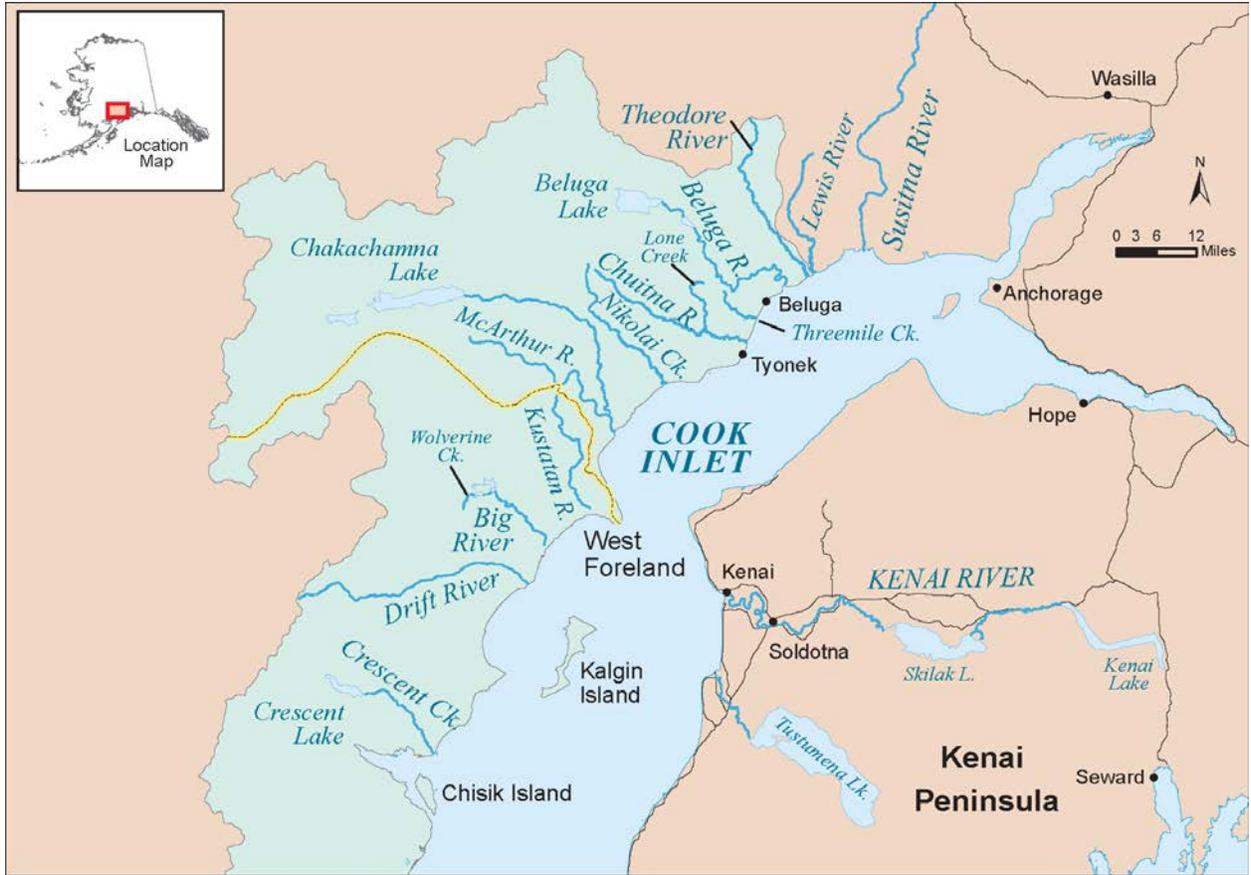


Figure 24.—West Cook Inlet Management Unit (WCIMU).

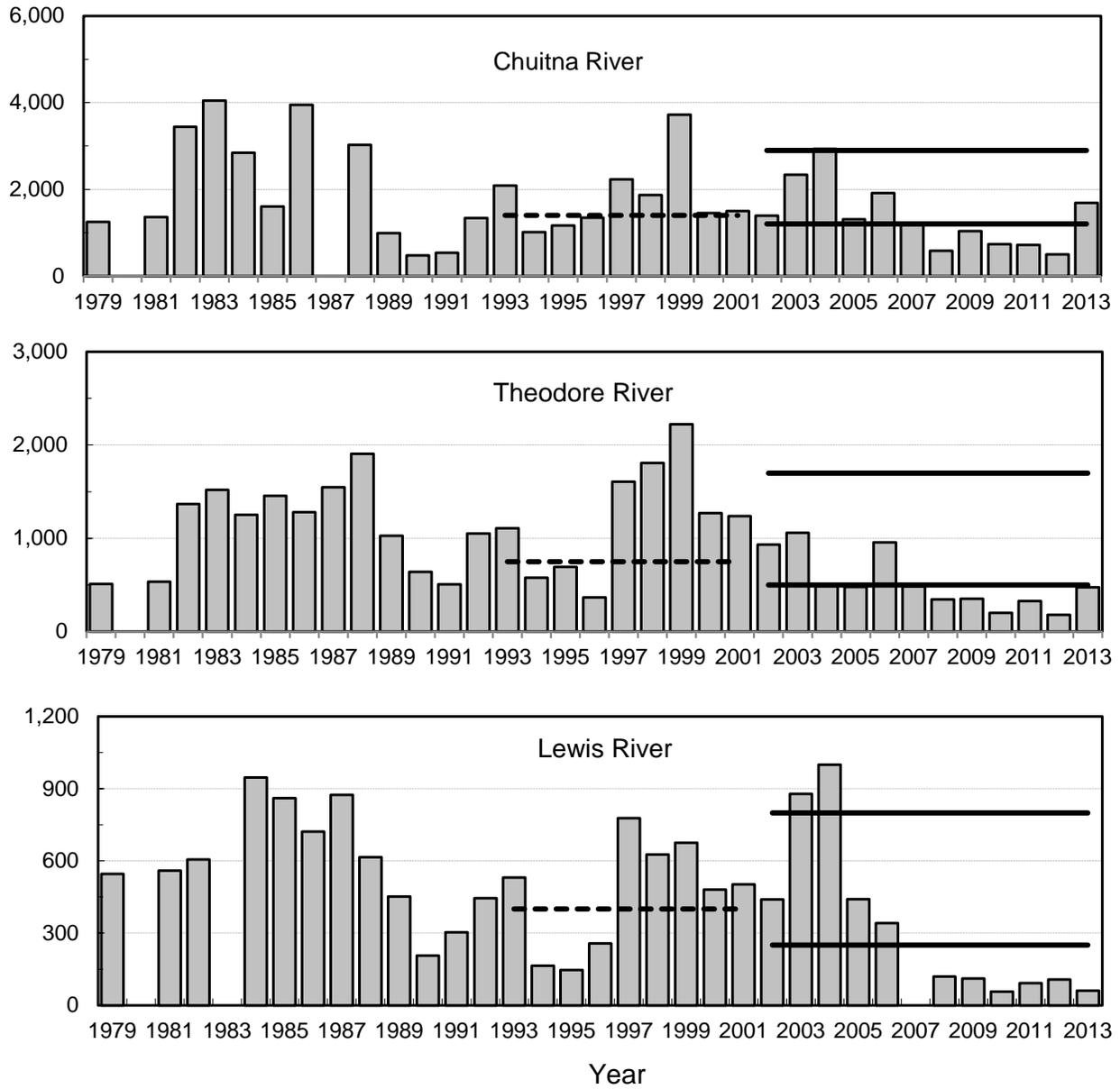


Figure 25.—Chinook salmon escapements at major West Cook Inlet freshwater drainages, 1979–2013.

Source: ADF&G aerial survey data.

Note: Chinook salmon escapements (number of fish) are shown on the y-axes (scales differ between sites). The dashed line is the biological escapement goal; solid lines are the sustainable escapement goal range.

Little Susitna River Coho Salmon

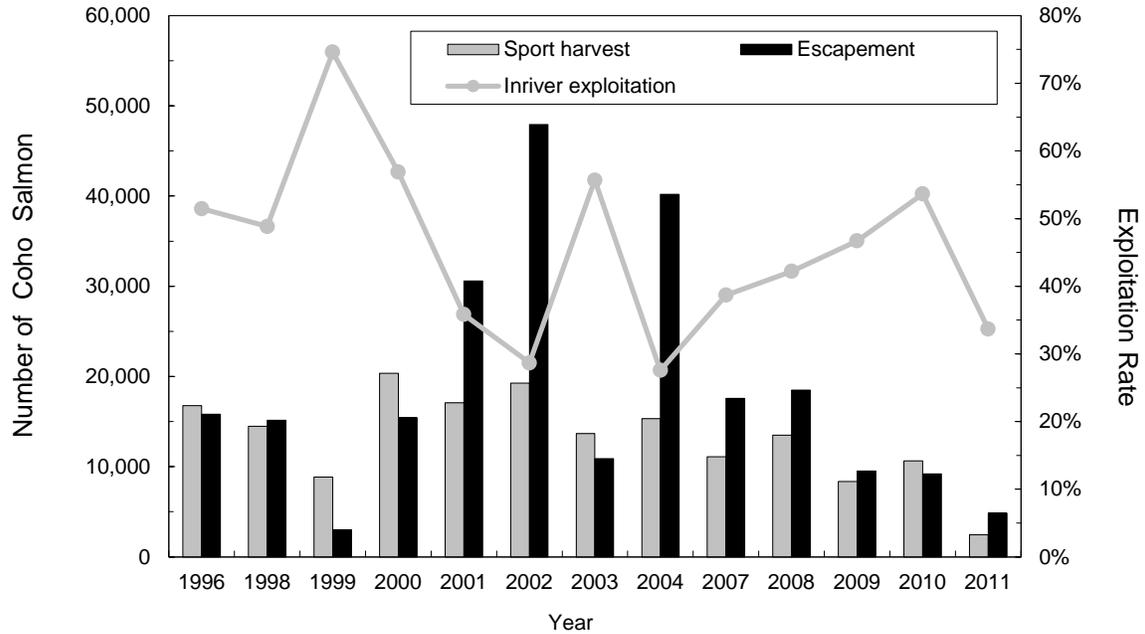


Figure 26.—Coho salmon harvest, escapement, and inriver exploitation from the Little Susitna River sport fishery for years that counts were completed at a weir located at RM 71.

Source: ADF&G aerial survey data and Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

Note: Escapement counts in 1997, 2005–2006, and 2012–2013 were incomplete due to flooding.

Coho Salmon Weir and Index Counts

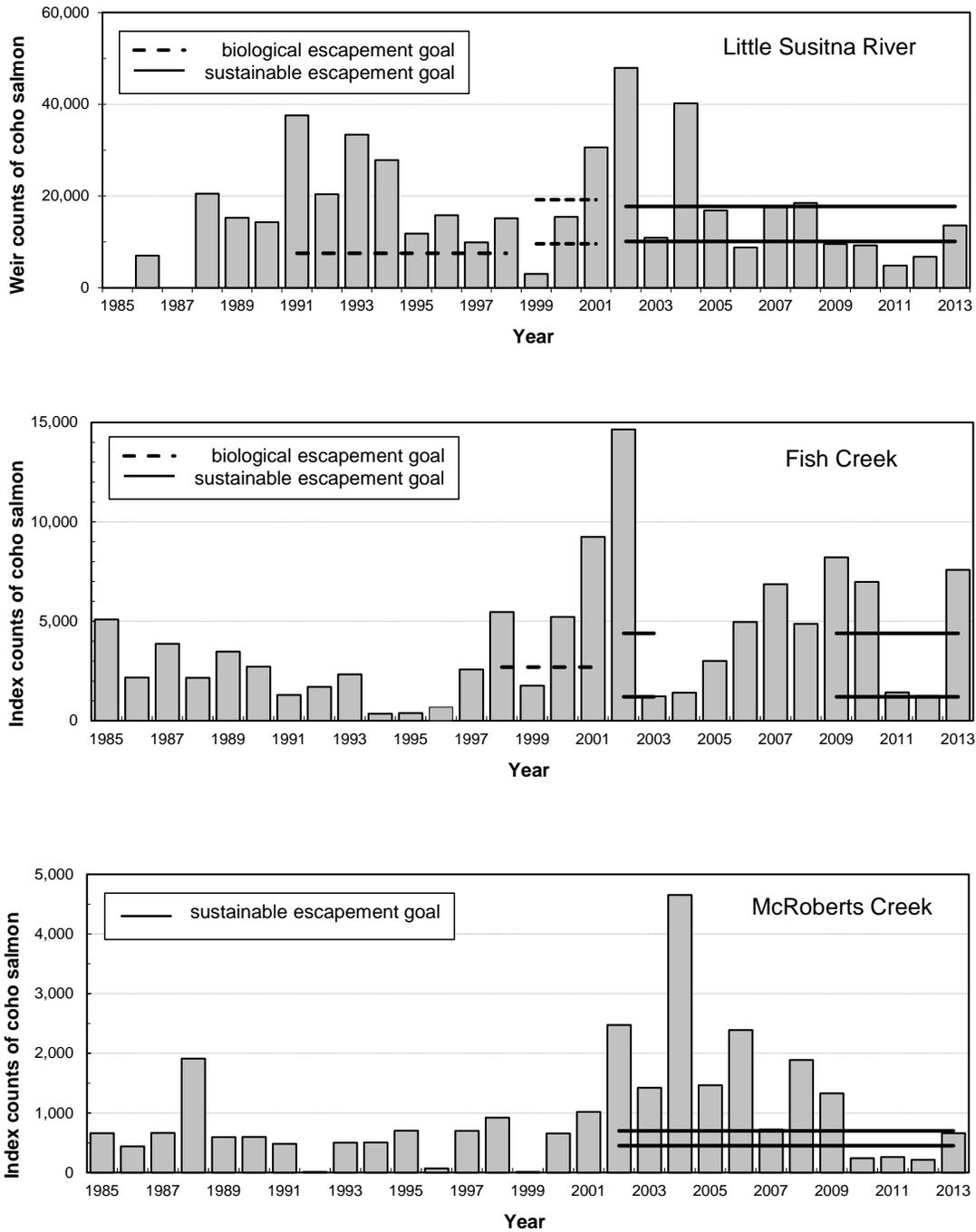


Figure 27.—Little Susitna River weir (top), Fish Creek weir (middle), and McRoberts Creek index counts (bottom) of coho salmon, 1985–2013.

Source: ADF&G foot and weir surveys.

Note: For Little Susitna River, there was no weir in 1985 and 1987; there were incomplete counts in 1986–1997, 2005–2006, and 2012–2013 due to flooding and weir submersion. For Fish Creek, the weir was operated primarily for sockeye salmon; complete coho salmon counts were obtained in 1990–1992, 1998–2003, 2009–2010, and 2012–2013. Solid lines indicate sustainable escapement goal range.

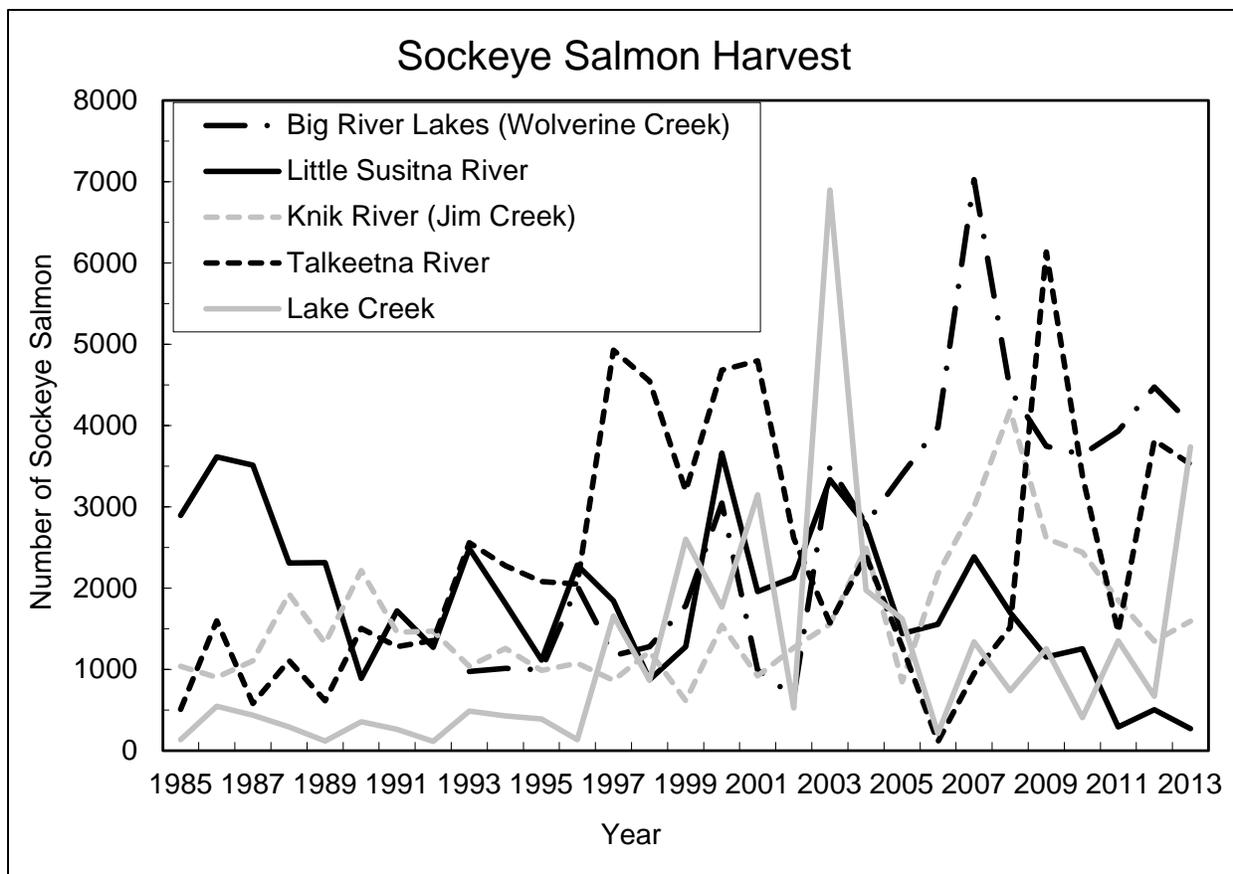


Figure 28.—Estimated harvest of sockeye salmon from major fisheries within the NCIMA, 1985–2013.

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

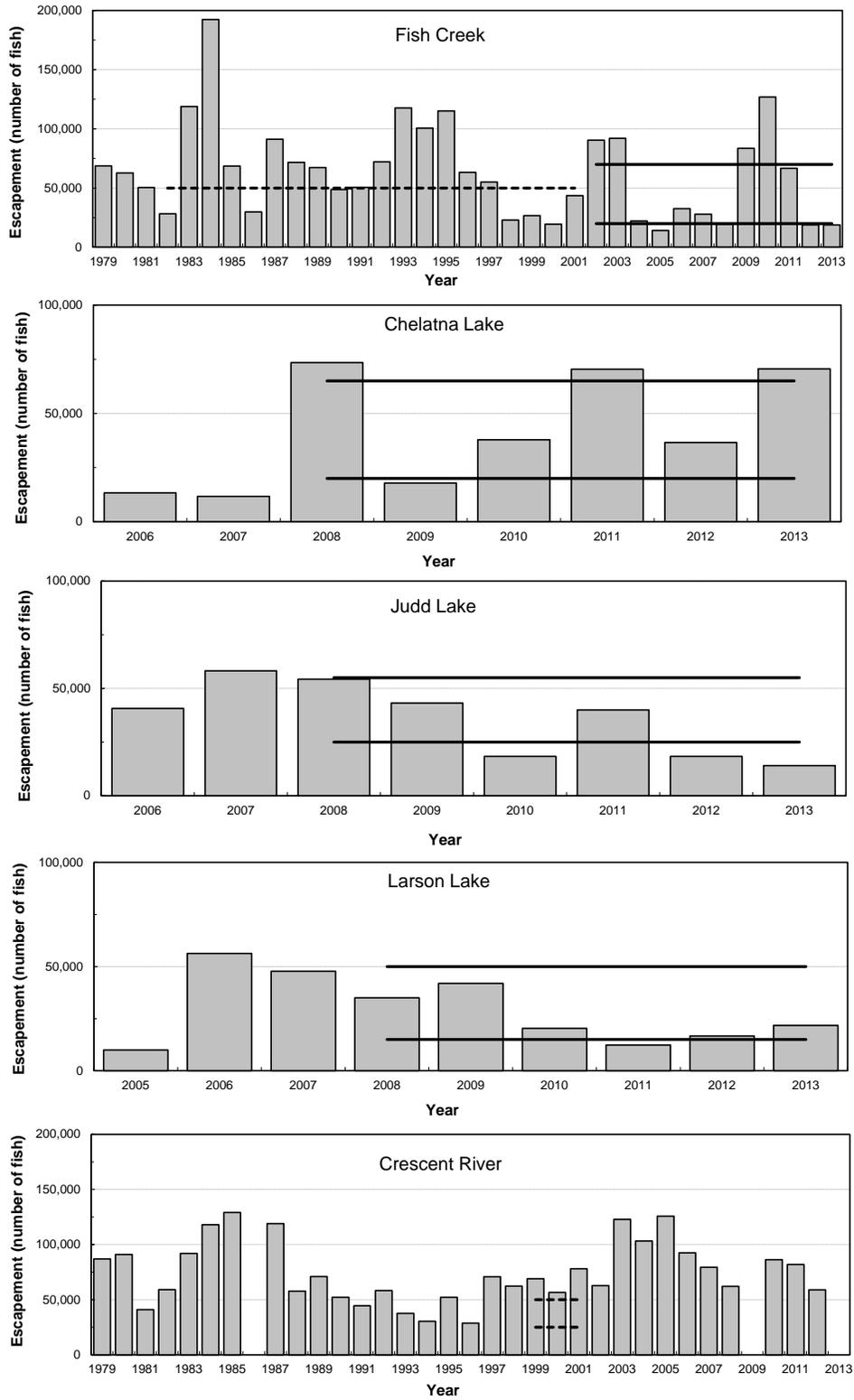


Figure 29.—Estimated sockeye salmon escapements from major fisheries in Northern Cook Inlet Management Area, 1979–2013.

Note: Dashed lines indicate an old escapement goal or range; solid lines indicate sustainable escapement goal range.

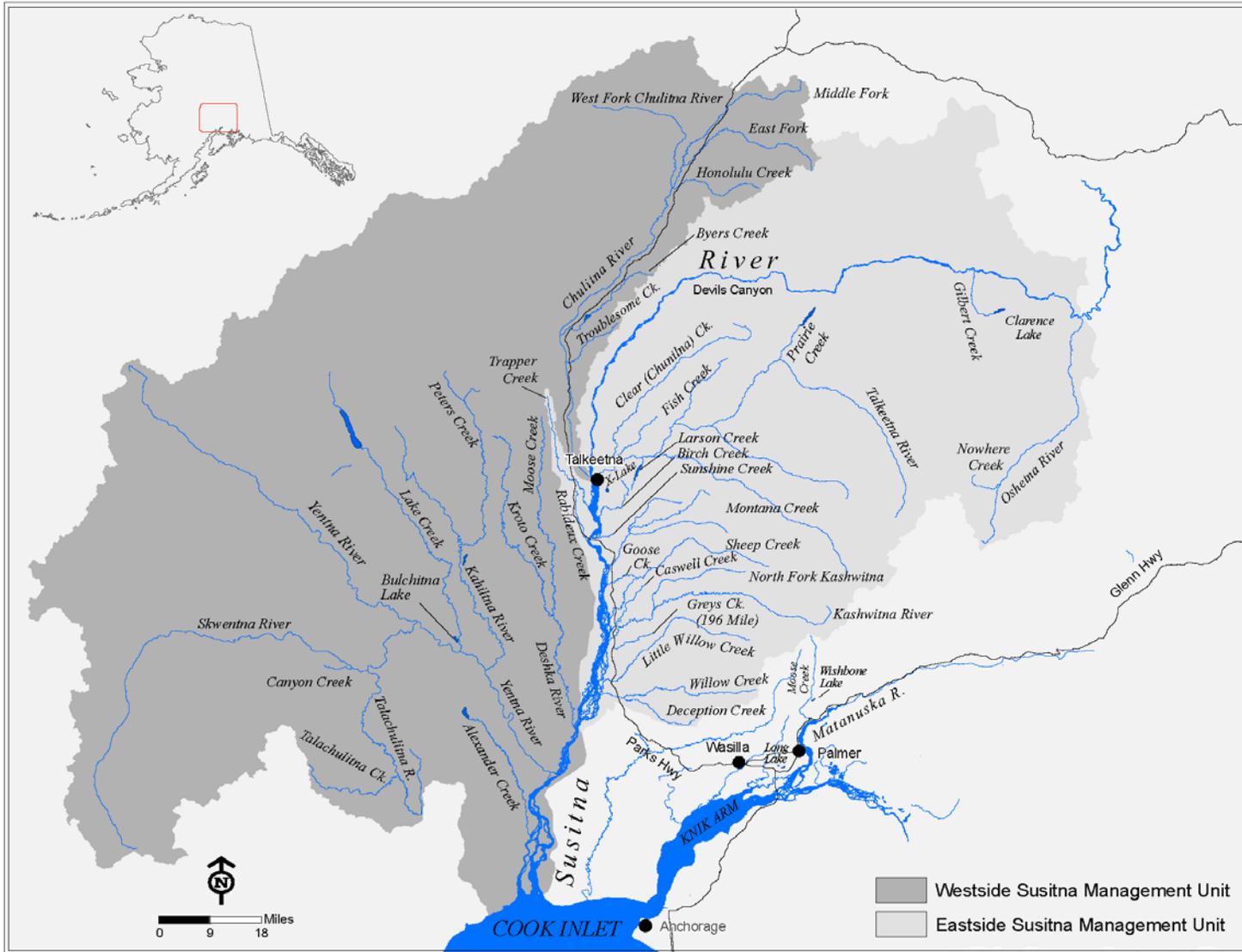


Figure 30.—Susitna River drainages.

Statewide and NCIMA Northern Pike Harvest

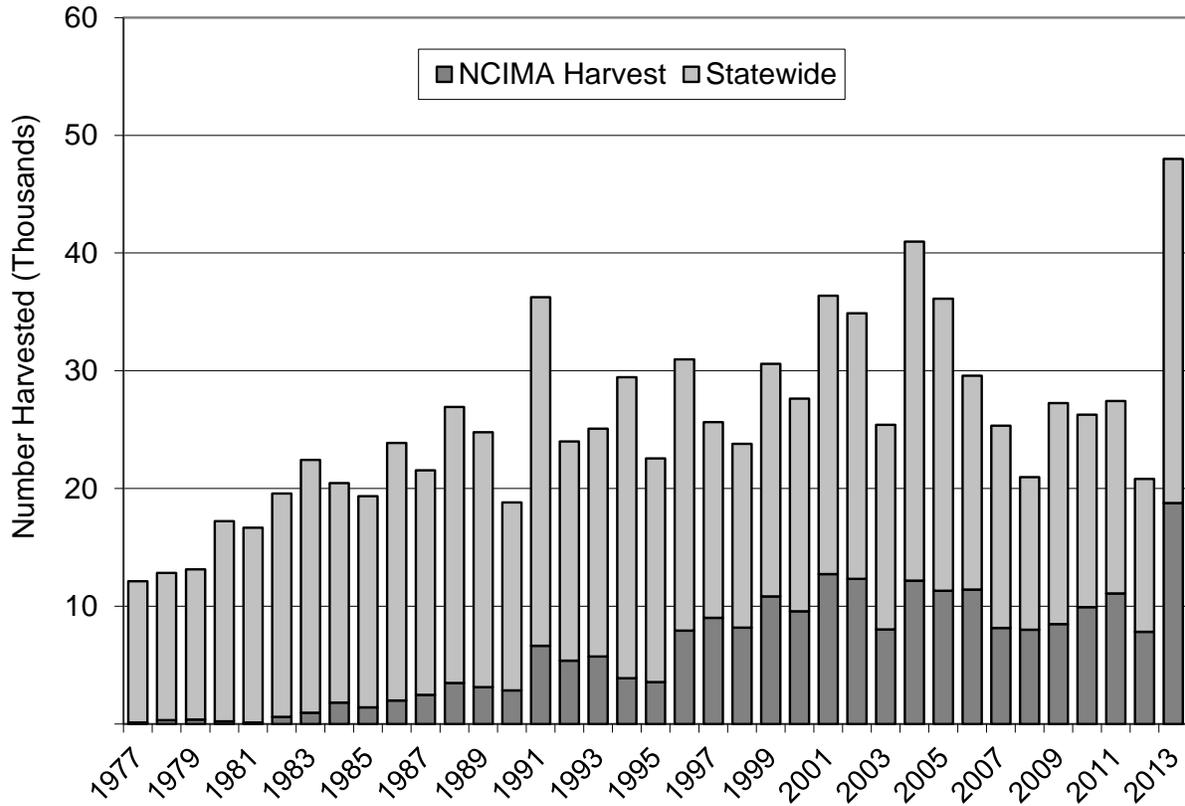


Figure 31.—Estimated northern pike harvest from the Northern Cook Inlet Management Area and statewide, 1977–2013.

Source: Alaska Sport Fishing Survey database [Internet]. 1996–2013. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited January 2015). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>

**APPENDIX A: FISH AND GAME ADVISORY
COMMITTEES**

Appendix A1.–Northern Cook Inlet Management Area, Fish and Game Advisory Committee members 2012–2013.

| Advisory committee | City | Last | First |
|--------------------|---------------|------------|------------|
| Susitna Valley | Trapper Creek | Bakker | Melanie |
| | Sunshine | Gustafson | Gus |
| | Talkeetna | Kingery | Todd |
| | Willow | Knowles | Bruce |
| | Talkeetna | Mahay | Israel |
| | Talkeetna | Meals | Robert |
| | Nancy Lake | Runyan | Steve |
| | Big Lake | Seime | Craig |
| | Willow | Schacle | Ted |
| | Sheep Creek | Shanigan | Terrence |
| Matanuska Valley | Wasilla | Bartelli | Stephen |
| | Wasilla | Beckman | Eric |
| | Wasilla | Buirge | Mike |
| | Palmer | Couch | Andy |
| | Palmer | Crowley | Dane |
| | Wasilla | Darilek | Stephen |
| | Wasilla | Dykstra | Gerrit |
| | Palmer | Ehman | Jehnifer |
| | Palmer | Folsom | Bill |
| | Big Lake | Grove | Melvin |
| | Wasilla | Jones | Tony |
| | Wasilla | Montgomery | Dan |
| | Wasilla | Payton | Israel |
| | Wasilla | Sager | Max |
| | Palmer | Tuttle | Jeff |
| | Palmer | Westfall | Keith |
| | Wasilla | Young | David |
| Mt. Yenlo | Skwentna | Brion | Tom |
| | Skwentna | Childs | Steve |
| | Skwentna | Childs | Bonnie Dee |
| | Skwentna | Ivey | James |
| | Skwentna | Johnson | Eric |
| | Skwentna | King | Sara |
| | Wasilla | Meisner | Bob |
| | Skwentna | Payton | Thomas |
| | Willow | Stanley | Barry |
| | Skwentna | Torkelson | Mark |

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| Advisory committee | City | Last | First |
|--------------------|----------|--------------|---------|
| Denali | Cantwell | Atkins | Ray |
| | Cantwell | Bulard | Armeda |
| | Cantwell | Burney | Jeff |
| | Cantwell | Carlson | Gordon |
| | Cantwell | Gore | Marie |
| | Cantwell | Gore | Bruce |
| | Cantwell | Holum | Don |
| | Cantwell | Holum | Caleb |
| | Cantwell | Williams | Lance |
| Tyonek | Tyonek | Chickalusion | Chad |
| | Beluga | Heilman | Larry |
| | Tyonek | Jones | Randall |
| | Tyonek | Standifer | John |
| | Tyonek | Standifer | Brandy |
| | Tyonek | Standifer | Randy |
| | Tyonek | Standifer | Jessica |
| | Tyonek | Standifer | Donald |
| | Tyonek | Valka | Betty |

**APPENDIX B: REGULATORY HISTORIES OF SELECTED
FISHERIES**

Chinook salmon fishing in NCIMA waters was open from statehood through 1963. During 1964 through 1966, Chinook salmon fishing in fresh water was closed. During 1967 through 1970, Alexander Creek, Clear Creek, Deshka River, and Lake Creek were open in their entirety. This fishery operated on a harvest quota system of 250 fish, over 20 inches in length, over a 15-day season during the middle of June. Achievement of the quota resulted in early season closure. A 1 fish per day, 2 per season bag limit for fish over 20 inches in length was in place, and a punch card was required to participate in the fishery. In 1971, the harvest quota was eliminated. During 1971 and 1972, in addition to the 15-day season in Alexander Creek, Deshka River, and Lake Creek, a more restrictive fishery was allowed (few days) in Clear Creek and portions of the Little Susitna River, Ship Creek (Anchorage), and Willow Creek; however, a punch card was still required. In 1973, the area Chinook salmon fishery was closed to harvest of Chinook salmon 20 inches or larger in length and remained so through 1978.

Selected Susitna River Drainage Area streams were reopened to Chinook salmon fishing in 1979 after being closed for several years because of low stock abundance. Cautious incremental expansion has characterized the area's Chinook salmon fisheries since they reopened. From 1979 through 1982, Chinook salmon fishing was permitted at Alexander Creek, Lake Creek, and at the Deshka River from the fourth Saturday in May through 6 July. These streams drain into the Susitna River from the west. Clear Creek, a tributary of the Talkeetna River, also had a similar Chinook salmon season. In addition, 3 eastside tributaries of the Susitna River—Willow, Caswell, and Montana creeks—were open on only Saturdays and Sundays for 4 consecutive weekends, commencing on the second Saturday in June. Harvest quotas, ranging from 200 to 7,000 Chinook salmon, governed these fisheries from 1979 through 1982. The Chuitna River, a coastal stream near Beluga, and the entire Yentna and Talkeetna river drainages were opened to Chinook salmon fishing in 1983. The opening date for Chinook salmon fisheries that provided continuous daily fishing was also changed to 1 January.

In 1984, the remaining coastal streams near Beluga and all waters draining into the westside of the Susitna River downstream from the Deshka River were opened to Chinook salmon fishing. In 1986, portions of 5 road-accessible streams on the east side of the Susitna River opened to weekend-only fishing. These streams were Little Willow, Goose, Sunshine, Sheep, and Birch creeks.

Expanded Chinook salmon fishing opportunities continued in 1987, when Monday fishing was added to all former weekend-only fisheries in waters that drain into the Susitna River from the east. Saturday through Monday fishing was also allowed on the Susitna River and all flowing waters within one-quarter mile of the Susitna River (excluding the Kashwitna River) between the Deshka and Talkeetna rivers. These "corridor" fisheries were open for 4 continuous "weekends," similar to the previously mentioned Saturday through Monday fisheries. Chinook salmon fishing was permitted for the first time on the Susitna River drainage from the confluence of the Susitna and Talkeetna rivers upstream to Devils Canyon but excluding the Chulitna River drainage. Unbaited, single-hook, artificial lures were mandatory in this area. The season extended from 1 January through 13 July. The season for all Susitna River and coastal fisheries that formerly closed on 6 July was extended to 13 July in 1987.

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In 1989, Chinook salmon fishing was allowed within a one-quarter mile radius of the mouth of the Kashwitna River. That same year, fishing was permitted daily at Willow Creek between 1 January and the third Monday in June and on Saturday through Monday for 2 consecutive weeks, starting the fourth Saturday in June.

In 1979, bag and possession limits were 1 Chinook salmon 20 inches or more in length. The following year, bag and possession limits changed to 2 Chinook salmon 20 inches or more in length, but only 1 Chinook salmon could be over 28 inches in length. In 1981, the bag limit was reduced to 1 Chinook salmon 20 inches or more in length and in possession. This limit remained in effect through 1985. A limit of 5 fish (20 inches or more in length) per year governed all Cook Inlet Chinook salmon fisheries from 1979 through 1985. This limit applied collectively to Northern Cook Inlet fresh water, Cook Inlet salt water, and the Kenai Peninsula.

In 1986, bag and possession limits for the western drainages of the Susitna River were changed to 2 Chinook salmon daily, 16 inches or more in length, and 4 in possession, and these limits remained through 1992. Only 1 fish daily and 2 in possession could be over 28 inches. Similar limits also applied to the West Cook Inlet Area coastal fisheries. Bag and possession limits for eastern drainages of the Susitna River in 1986 were 1 Chinook salmon, 16 inches or more in length, and 2 in possession. The seasonal limit was 5 Chinook salmon, 16 inches or more in length. From 1979 through 1988, anglers were required to list their Chinook salmon harvest on nontransferable harvest record cards. The date and location of harvested Chinook salmon were recorded. From 1980 through 1982, a \$5 permit stamp was mandatory for Chinook salmon fishing. The harvest record and yearly limit were eliminated for all NCI Chinook salmon fisheries in 1989.

During the November 1992 Alaska Board of Fisheries (BOF) meeting, several regulations were changed in the Susitna–West Cook Inlet Management Area effective for the 1993 season. A seasonal limit of 5 Chinook salmon was established for all waters of Cook Inlet. Individuals or companies engaged in freshwater sport fish guiding were prohibited from participating or engaging in sport fishing while clients were present or within their control or responsibility during the Chinook salmon season, except when guiding a client subject to the Americans with Disabilities Act.

In effect for the 1993 season in the West Cook Inlet Area, the Chinook salmon fishing season was reduced in length to end on 30 June. The bag and possession limits were reduced in areas open to the retention of Chinook salmon 16 inches or more in length to 1 daily and 1 in possession. Additionally, in the areas of the West Cook Inlet Area listed below, only unbaited, artificial lures could be used, and Chinook salmon 16 inches or more in length could not be possessed or retained and had to be released immediately: 1) the Chuitna River drainage upstream of an ADF&G marker located adjacent to the old cable crossing, 2) the Theodore River drainage upstream of an ADF&G marker located approximately 1 mile upstream of the Beluga-Anchorage high voltage power lines, and 3) the Lewis River drainage upstream of an ADF&G marker located approximately 1 river mile upstream of the main Beluga Haul Road Bridge.

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Action during the November 1992 BOF meeting also reduced the Chinook salmon bag and possession limits in the Susitna River drainage including all flowing waters draining into the west side of the Susitna River downstream of and including the Deshka River. The bag and possession limits for Chinook salmon over 16 inches were reduced to 1 daily and 2 in possession.

In addition to BOF action, legislative action during June 1992 established provisions beginning in 1993 that prohibited resident or nonresident anglers from fishing for Chinook salmon in Alaska without a king (Chinook) salmon stamp.

Prior to the 1994 season, in anticipation of a poor Deshka River Chinook salmon run, an emergency order was issued reducing the Chinook salmon possession limit to 1 fish and eliminating the use of bait in the Deshka River from 1 May through 14 July. As the 1994 season progressed, it became apparent that weak Chinook salmon runs were occurring in the entire Susitna River drainage and particularly in the Deshka River. In response to this, an emergency order was issued for 17 June through 13 July 1994 closing all waters of the Deshka River to sport fishing for Chinook salmon and prohibiting the use of bait in all waters of the Susitna River drainage downstream of the Deshka River that flow into the Susitna River from the east and into the Alexander Creek drainage, all waters of the Yentna River drainage, all waters of the Talkeetna River drainage, and all waters of the Chulitna River drainage.

During its October 1994 work session, the BOF chose to delegate to ADF&G the authority to change regulations for the 1995 fishing season. These changes were as follows:

- 1) The Deshka River and Prairie Creek were closed to fishing for Chinook salmon.
- 2) Alexander Creek above the confluence of Trail Creek was closed to fishing for Chinook salmon.
- 3) The bag and possession limits in the Susitna River and Little Susitna River drainages were reduced to 1 Chinook salmon over 16 inches in length.
- 4) The use of bait throughout the NCIMA was prohibited (excluding the Anchorage Management Unit).
- 5) Fishing in the NCIMA was allowed only between the hours of 6:00 AM and 11:00 PM from 15 May through 13 July. This time restriction did not apply to that portion of the Susitna River drainage currently opened to weekend-only fishing (e.g., between, but not including, the Deshka River and the Talkeetna River) and the Anchorage Management Unit.
- 6) The first opening of the Northern District commercial Chinook salmon fishery would occur by emergency order. Additional opening of this fishery would be dependent upon inseason indications of run strength.

The only new regulation for the 1996 season was the closure of the Lewis River to Chinook salmon fishing, including catch-and-release for Chinook salmon.

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The BOF convened in Anchorage, Alaska during 11–17 November 1996. A brief summary of the regulatory changes adopted by the BOF affecting the Susitna–West Cook Inlet Area Chinook salmon fisheries follows (note that “king” replaces “Chinook” in the regulatory language and “department” refers to Alaska Department of Fish and Game):

5 AAC 21.366. Northern District King Salmon Management Plan

To fulfill changes to the Upper Cook Inlet King Salmon Management Plan, as adopted by the Board of Fisheries, the Department of Fish and Game shall manage the Northern District commercial king salmon fishery as follows:

- (3) The harvest shall not exceed 12,500 king salmon.
- (8) The season closes on 24 June, unless closed earlier by emergency order.
- (9) The number of regular periods shall be determined by the department based on preseason expectations of king salmon run strength.
- (10) The area from 1 mile south of the Theodore River to the Susitna River is closed to fishing; provisions of this paragraph do not apply after 31 December 1998.
- (11) If at least 90% of the biological escapement goal (BEG) for the Theodore River (BEG = 750) or Chuitna River (BEG = 1,400) is not met during the 1997 fishing season, the area from 1 mile south of the Chuitna River to the Susitna River will be closed to commercial fishing during the 1998 fishing season; the provisions of this paragraph do not apply after 31 December 1998.
- (12) In addition to (11) above, if at least 90% of the biological escapement goal for the Chuitna River has not been met during the 1997 fishing season, the area from 1 mile south of the Chuitna River to the Susitna River will be closed to sport fishing for king salmon during the 1998 fishing season; the provisions of this paragraph do not apply after 31 December 1998.

5 AAC 61.010. Fishing Seasons

The Alexander Creek drainage is open to the retention (harvest) of king salmon from 1 January through 30 June downstream from an ADF&G regulatory marker at Granite Creek.

5 AAC 61.020. Bag Limits, Possession Limits, and Size Limits

In all waters of Alexander Creek drainage between an ADF&G regulatory marker located at Granite Creek, upstream to an ADF&G regulatory marker located 400 yards upstream of Trail Creek, king salmon 16 inches or more in length may not be possessed or retained. All king salmon caught must be released immediately.

5 AAC 61.035. Methods and Means

Only unbaited, single-hook, artificial lures may be used from 1 January through 30 June in all waters of the Alexander Creek drainage between an ADF&G regulatory marker located at Granite Creek to an ADF&G regulatory marker located 400 yards upstream of Trail Creek.

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5 AAC 61.050. Waters Closed to Sport Fishing

- 1) Peters Creek (Susitna River drainage) is closed to sport fishing for king salmon upstream from an ADF&G regulatory marker, located approximately 1 mile upstream from its confluence with the Kahiltna River.
- 2) The Theodore River is closed to sport fishing for king salmon. The provisions of this paragraph do not apply after 31 December 1998.

5 AAC 61.020. Bag Limits, Possession Limits, and Size Limits

- 1) In all waters of the Susitna River drainage between the confluence of the Deshka River and the confluence of the Talkeetna River, after taking a king salmon 16 inches or more in length, a person may not fish for any species of fish in any water open to king salmon fishing during that same day.
- 2) In the Little Susitna River, from its mouth to the Parks Highway Bridge at Houston, after taking a king salmon 16 inches or more in length, a person may not fish for any species of fish in any water open to king salmon fishing during that same day.
- 3) In all waters of the Susitna–West Cook Inlet Management Area, excluding the Susitna River between its confluence with the Deshka River and its confluence with the Talkeetna River: after taking a king salmon 16 inches or more in length, a person may not fish for king salmon during that same day.

5 AAC 61.020. Bag Limits, Possession Limits, and Size Limits

The bag and possession limits of king salmon 16 inches or more in length taken from the Little Susitna River drainage are 1 fish per day and in possession.

During 1997, the Deshka River was open to Chinook salmon fishing on 21 June through 13 July. Fishing was limited to the lower 2 miles of the river and all Chinook salmon regulations applying to the Susitna River from its mouth to its confluence with the Deshka River were in effect for the Deshka River.

In 1998, the Deshka River was open to Chinook salmon fishing from its confluence with the Susitna River upstream 5 miles to an ADF&G marker. The Deshka River seasonal bag limit was 2 Chinook salmon over 16 inches. In addition, all Chinook salmon regulations applying to the Susitna River from its mouth to its confluence with the Deshka River were in effect for the Deshka River. Inseason emergency orders (EOs) opened Willow Creek during 20–22 June to Chinook salmon fishing to correct an oversight in the regulations, and 1 Friday was added to Chinook salmon fishing in the Susitna River between the Deshka River and the Talkeetna River (excluding both).

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The BOF made several changes for the 1999 season. The Deshka River was opened to Chinook salmon fishing from its mouth upstream to Chijuk Creek, a distance of approximately 17 river miles, from 1 January to 13 July. Other area regulations applied, including bag and possession limits of 1 fish per day, a seasonal limit of 5 fish, and that upon harvesting a Chinook salmon, an angler must quit fishing for Chinook salmon for the remainder of the day. Additionally, fishing was allowed only between 6:00 AM to 11:00 PM, no bait was allowed, and guides were not allowed to fish while guiding clients.

The area open for retention of Chinook salmon on Alexander Creek was extended from its mouth upstream to Trail Creek, providing anglers with an additional 11 miles of stream during the 1997 and 1998 seasons in which they may harvest Chinook salmon.

The Theodore River was opened to catch-and-release fishing for Chinook salmon with only single hook artificial lures from 1 January through 30 June. Other West Cook Inlet Area regulations applied as follows: fishing was allowed only between 6:00 AM and 11:00 PM, bait was prohibited, and guides were not allowed to fish while guiding.

There were increased fishing opportunities for the road-accessible Parks Highway streams (Eastside Susitna River tributaries) during the early part of June. The Parks Highway streams were open to Chinook salmon fishing from 1 January through the third Monday in June and for the next 2 consecutive 3-day weekends. This regulation was consistent with the fishing season on Willow Creek.

On the Little Susitna River, anglers were allowed to use treble hooks year-round downstream of the Parks Highway Bridge. Existing bait restrictions were modified to allow the use of bait during the month of September.

The area open to Chinook salmon fishing on the Kashwitna River was extended from its mouth upstream to the Parks Highway Bridge, a distance of 2 miles. The new season regulations for Parks Highway streams (above) were applied to the Kashwitna River.

In all waters of the Westside Susitna River and West Cook Inlet management areas (excluding waters between the mouths of the Deshka and Talkeetna rivers), anglers were allowed to continue to fish (catch-and-release) for Chinook salmon once they harvested their limit (excluding Alexander Creek, Lake Creek, Deshka River, Fish Lake Creek, and Clear Creek, which all required that fishing for Chinook salmon cease for the day once the limit was harvested).

During January 2001, the BOF imposed a statewide definition of a "jack" Chinook salmon as any Chinook salmon 20 inches or less in length. In all fresh waters open to Chinook salmon fishing, BOF imposed bag and possession limits for "jacks" of 10 fish, in addition to any limits for Chinook salmon over 20 inches in length, and ruled that "jack" limits do not count against annual or seasonal limits. This new definition increased the length requirement for Chinook salmon that must be recorded for the 5-fish seasonal limit from 16 inches to 20 inches.

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A BOF meeting was held in February 2002, resulting in the following changes in Chinook salmon regulations:

- 1) Catch-and-release fishing was allowed for Chinook salmon in the east fork of the Chulitna River, 1 January through 13 July. Only 1 single-hook, unbaited artificial lure could be used 1 January through 13 July.
- 2) The possession limit was increased to 2 Chinook salmon for Westside Susitna River tributaries (excluding Alexander Creek).
- 3) In the *Northern District King Salmon Management Plan*, the following was established: the commercial setnet fishery opens on the first Monday on or after 25 May and closes on 24 June. The number of commercial periods depends upon expected northern Cook Inlet Chinook salmon run strengths, and there shall be no more than 3 commercial openings targeting Chinook salmon. The area from an ADF&G marker located 1 mile south of the Theodore River to the Susitna River is open to fishing in the second regular period only. If the Theodore, Lewis, or Ivan rivers are closed to sport fishing, the area from an ADF&G regulatory marker located 1 mile south of the Theodore River to the Susitna River is closed to commercial Chinook salmon fishing for the remainder of the directed Chinook salmon fishery. If the Deshka River is closed to sport fishing, the commercial Chinook salmon fishery throughout the Northern District is closed for the remainder of the directed Chinook salmon fishery. If the Chuitna River is closed to sport fishing, the area from an ADF&G marker located 1 mile south of the Chuitna River to the Susitna River is closed to commercial Chinook salmon fishing for the remainder of the directed Chinook salmon fishery.
- 4) Catch-and-release fishing was allowed in the entire Theodore and Lewis rivers with no bait and single hook only.

These regulations were not signed into law prior to the start of the 2002 season. Because of this delay, the following EOs were issued to allow the new regulations to be in effect during the beginning of the fishing season:

- 1) The possession limit was increased to 2 Chinook salmon in all Westside Susitna River tributaries except Alexander Creek.
- 2) The entire Theodore and Lewis rivers were opened to catch-and-release fishing for Chinook salmon through 30 June with single hook and no bait.
- 3) The use of bait was allowed in the first 17 miles of the Deshka River and within a one-quarter mile radius of the mouth of the Deshka River with the Susitna River, 8 June–13 July 2002.

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A BOF meeting was held January 2005 and included the following changes to the Chinook salmon sport fish regulations:

- 1) Anglers were allowed to use bait earlier in the Deshka River, commencing 15 May.
- 2) The Parks Highway streams were opened to Chinook salmon fishing for an additional 3-day weekend. (For 2005, the Parks Highway streams were open from 1 January to 20 June and on 25–27 June, 2–4 July, and 9–11 July).
- 3) The area open to Chinook salmon fishing on the Kashwitna River was increased by approximately 1 mile from the Parks Highway Bridge to the Alaska Railroad Bridge.
- 4) Anglers could no longer fish for Chinook salmon 20 inches or less in waters closed to Chinook salmon fishing.
- 5) Eklutna Tailrace and all waters within a one-half mile radius of its confluence with the Knik River were opened to fishing for Chinook salmon from 1 January through 31 December. Once a bag limit of Chinook salmon 20 inches or longer was retained, an angler was not allowed to fish in any water open to Chinook salmon fishing on that same day.

Commercial fish regulatory changes included the following:

- 1) Alterations to the *Northern District King Salmon Management Plan* limited fishing periods to a maximum of 3, increased fishing time per period from 6 hours to 12 hours, and removed the gear restriction of 2 nets from 1 August to 10 August.
- 2) The *Big River Sockeye Salmon Management Plan* was amended to allow fishing in a portion of the Kalgin Island Subdistrict along the western shore from Light Point (lat 60°29.00'N, long 151°50.50'W) to the Kalgin Island Light on the southern end of the island (lat 60°20.80'N, long 152°05.09'W). This fishery was closed if 1,000 Chinook salmon were harvested.

A BOF meeting held in February 2008 resulted in the following Chinook salmon regulation changes:

- 1) Alexander Creek was closed to Chinook salmon fishing.
- 2) The area open to Chinook salmon fishing at the Eklutna Tailrace was expanded. In addition to the Tailrace and waters within a one-half mile radius of the mouth, anglers were allowed to fish downstream to an ADF&G marker located approximately 2 miles downstream of the Tailrace mouth.

In 2009, the BOF enacted an emergency regulation on 20 May to reduce the fishing time in the Northern District setnet fishery from 12 to 6 hours by allowing commercial salmon fishing to occur only between 7:00 AM and 1:00 PM. On 11 June, the Northern District was closed to the harvest of Chinook salmon for the remainder of the fishing periods scheduled for 2009 due to the closure of the Deshka River Chinook salmon sport fishery.

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A BOF meeting held in February 2011 resulted in the following Chinook salmon regulation changes:

- 1) The Chuitna, Theodore, Lewis, and Beluga rivers were closed to sport fishing for Chinook salmon.
- 2) Goose Creek within Unit 2 of the Susitna River was closed to sport fishing for Chinook salmon.
- 3) For Parks Highway streams open to Chinook salmon fishing within Unit 2 of the Susitna River
 - a.) the fishing season was shortened (fishing was open until the third Monday in June and for the following 2 consecutive 3-day [Saturday–Monday] weekends; for 2011, the season was from 1 January–20 June, 25 June–27 June, 2 July–4 July),
 - b.) from 15 May to 13 July, fishing for all species was allowed only from 6:00 AM to 11:00 PM, and
 - c.) these new regulations applied to Willow, Little Willow, Grays, Caswell, Sheep, Montana, Sunshine, and Rabideux creeks, and the Kashwitna River.
- 4) Fishing from a boat for any species was prohibited on a portion of the Susitna River at the farthest downstream mouth of Willow Creek, also known as the “first mouth” of Willow Creek, from 1 May to 13 July. Markers located on the upstream bank and downstream approximately 300 yards delineated the area closed to fishing from a boat.
- 5) On the Talachulitna River, anglers retaining a Chinook salmon 20 inches or longer were required to stop fishing for Chinook salmon within a 1-mile radius of the mouth of the Talachulitna River for the remainder of the day.
- 6) Fishing for any species was closed within a one-half mile radius of the mouth of Alexander Creek from 1 May–13 July.
- 7) A “stock of concern” status was established for Chinook salmon stocks in the Chuitna, Theodore, and Lewis rivers within the WCIMU; a “stock of yield concern” status was established for Goose and Willow creeks (Parks Highway streams) of the Susitna River; and a “stock of management concern” status was established for Alexander Creek of the lower Susitna River.
- 8) The area closed to commercial fishing was extended from 1 mile to about 4.8 miles south of the Chuitna River.

No new regulations were issued in 2012–2013.

Appendix B2.–Deshka River Chinook salmon regulatory changes, 1977–2013.

| Year | Fishery dates | Area and time restrictions | Method and gear restrictions | Bag and possession limits | Seasonal NCI limit | Other requirements |
|------|-----------------------|----------------------------------|------------------------------|---|--------------------|---|
| 1977 | closed to adults | | | ≤20" only | | |
| 1978 | closed to adults | | | ≤20" only | | |
| 1979 | 4th Sat. in May–6 Jul | mouth to Laub's Homestead marker | | 1/day >20" & 1 possession | 5 >20" | punch card required |
| 1980 | 4th Sat. in May–6 Jul | mouth to forks | | 2/day >20", only 1 >28" & 2 possession | 5 >20" | punch card required |
| 1981 | 4th Sat. in May–6 Jul | mouth to forks | | 1/day >20" & 2 possession | 5 >20" | harvest record sticker |
| 1982 | 4th Sat. in May–6 Jul | mouth to forks | | 1/day >20" & 2 possession | 5 >20" | permit stamp with record on back of license |
| 1983 | 1 Jan–6 Jul | mouth to forks | | 1/day >20" & 2 possession | 5 >20" | harvest record on back of license |
| 1984 | 1 Jan–6 Jul | mouth to forks | | 1/day >20" & 2 possession | 5 >20" | harvest record on back of license |
| 1985 | 1 Jan–6 Jul | mouth to forks | | 1/day >20" & 2 possession | 5 >20" | harvest record on back of license |
| 1986 | 1 Jan–6 Jul | mouth to forks | | 2/day >16" & 4 possession, only 1/day >28" & 2 possession | 5 >16" | harvest record on back of license |
| 1987 | 1 Jan–13 Jul | mouth to forks | | 2/day >16" & 4 possession, only 1/day >28" & 2 possession | 5 >16" | harvest record on back of license |
| 1988 | 1 Jan–13 Jul | mouth to forks | | 2/day >16" & 4 possession, only 1/day >28" & 2 possession | 5 >16" | harvest record back of license |
| 1989 | 1 Jan–13 Jul | mouth to forks | | 2/day >16" & 4 possession, only 1/day >28" & 2 possession | 5 >16" | |
| 1990 | 1 Jan–13 Jul | mouth to forks | | 2/day >16" & 4 possession, only 1/day >28" & 2 possession | 5 >16" | |
| 1991 | 1 Jan–13 Jul | mouth to forks | | 2/day >16" & 4 possession, only 1/day >28" & 2 possession | 5 >16" | |

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| Year | Fishery dates | Area and time restrictions | Method and gear restrictions | Bag and possession limits | Seasonal NCI limit | Other requirements |
|------|---------------------|---|---|---|--------------------------------|---|
| 1992 | 1 Jan–13 Jul | mouth to forks | no bait between Trapper Creek and forks on 22 Jun by EO | 1/day >16" & 1 possession, release of fish >16" between Trapper Creek and forks on 22 Jun by EO | 5 >16" | |
| 1993 | 1 Jan–13 Jul | mouth to forks | artificial only until 15 May | 1/day >16" & 2 possession | 5 >16" | king stamp with harvest record on back of license |
| 1994 | closed 17 Jun by EO | mouth to forks | artificial only until 16 May | 1/day >16" & 2 possession | 5 >16" | king stamp with harvest record on back of license |
| 1995 | closed | | | | | |
| 1996 | closed | | | | | |
| 1997 | opened 21 Jun by EO | lower 2 miles of river | artificial only | 1/day >16" & 1 possession | 5 >16" | king stamp with harvest record on back of license |
| 1998 | 1 Jan–13 Jul | lower 5 miles of river | artificial only | 1/day >16" & 1 possession | 5 >16" with only 2 from Deshka | king stamp with harvest record on back of license |
| 1999 | 1 Jan–13 Jul | mouth to Chijuk Creek: 6 AM–11 PM | artificial only | 1/day >16" & 1 possession | 5 >16" | king stamp with harvest record on back of license |
| 2000 | 1 Jan–13 Jul | mouth to Chijuk Creek: 6 AM–11 PM | bait allowed 8 Jun by EO | 1/day >16" & 1 possession | 5 >16" | king stamp with harvest record on back of license |
| 2001 | 1 Jan–13 Jul | mouth to Chijuk Creek: 6 AM–11 PM | bait allowed 12 Jun by EO | 1/day >20" & 1 possession | 5 >20" | king stamp with harvest record on back of license |
| 2002 | 1 Jan–13 Jul | mouth to Chijuk Creek: 6 AM–11 PM | bait allowed 8 Jun by regulation | 1/day >20" & 2 possession | 5 >20" | king stamp with harvest record on back of license |
| 2003 | 1 Jan–13 Jul | mouth to Chijuk Creek: 6 AM–11 PM | bait allowed 8 Jun by regulation | 2/day >20" & 4 possession on 18 Jun by EO | 5 >20" | king stamp with harvest record on back of license |
| 2004 | 1 Jan–13 Jul | mouth to Chijuk Creek: 6 AM–11 PM | bait allowed 28 May by EO | 2/day >20" & 4 possession on 12 Jun by EO | 5 >20" | king stamp with harvest record on back of license |
| 2005 | 1 Jan–13 Jul | mouth to Chijuk Creek: opened 24-hr on 27 May by EO | bait allowed 15 May by regulation | 2/day >20" & 4 possession on 27 May by EO | 5 >20" | king stamp with harvest record on back of license |

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| Year | Fishery dates | Area and time restrictions | Method and gear restrictions | Bag and possession limits | Seasonal NCI limit | Other requirements |
|------|---------------|---|---|---|--------------------|---|
| 2006 | 1 Jan–13 Jul | mouth to Chijuk Creek: opened 24-hr on 26 May by EO | bait allowed 15 May by regulation | 2/day >20" & 4 possession on 26 May by EO | 5 >20" | king stamp with harvest record on back of license |
| 2007 | 1 Jan–13 Jul | mouth to Chijuk Creek: opened 24-hr on 25 May by EO | bait allowed 15 May by regulation | 2/day >20" & 4 possession on 25 May by EO | 5 >20" | king stamp with harvest record on back of license |
| 2008 | 1 Jan–13 Jul | mouth to Chijuk Creek: 6 AM–11 PM, fishery closed 19 Jun by EO | bait not allowed 14 Jun–13 Jul by EO | 1/day >20" & 1 possession | 5 >20" | king stamp with harvest record on back of license |
| 2009 | 1 Jan–13 Jul | mouth to Chijuk Creek: 6 AM–11 PM, retention Sat, Sun, Mon only 13 May by EO, fishery closed 11 Jun by EO | bait not allowed after 20 Apr by EO. | 1/day >20" & 1 possession | 5 >20" | king stamp with harvest record on back of license |
| 2010 | 1 Jan–13 Jul | mouth to Chijuk Creek: 6 AM–11 PM | bait not allowed 12–19 Jun by EO | 1/day >20" & 1 possession | 5 >20" | king stamp with harvest record on back of license |
| 2011 | 1 Jan–13 Jul | mouth to Chijuk Creek: 6 AM–11 PM | bait allowed 15 May by regulation | 1/day >20" & 1 possession | 5 >20" | king stamp with harvest record on back of license |
| 2012 | 1 Jan–13 Jul | mouth to Chijuk Creek: 6 AM–11 PM, closed above weir after 19 Jun by EO, fishery closed 25 Jun by EO | single hook only after 1 May EO, bait not allowed after 19 Jun by EO | 1/day >20" & 1 possession | 2 >20" by EO | king stamp with harvest record on back of license |
| 2013 | 1 Jan–13 Jul | mouth to Chijuk Creek: 6 AM–11 PM | single hook only after 1 May by EO, bait not allowed 1 May–29 Jun by EO | 1/day >20" & 1 possession | 2 >20" by EO | king stamp with harvest record on back of license |

Note: Chinook salmon are “king” salmon in the regulatory language.

1995

- 1) The *Upper Cook Inlet Subsistence Salmon Management Plan* was repealed by the Alaska Board of Fisheries (BOF). BOF took action to allow a subsistence fishery as a personal use fishery. The Knik set gillnet fishery was executed as a personal use fishery.

1996

- 1) The *Upper Cook Inlet Personal Use Salmon Fishery Management Plan* (5 AAC 77.540) established time, area, methods, and means for taking salmon for personal use. This plan first went into effect during the 1996 season. It provided for personal use dip net fisheries in the Kenai and Kasilof rivers and Fish Creek. Additionally, limited personal use gillnet fishing opportunity was provided near the terminus of the Kasilof River. No Knik set gillnet fishery was provided.
- 2) Changes were made to the *Fish Creek Sockeye Management Plan* (5 AAC 21.364) concerning the Fish Creek personal use dip net fishery. The dip net fishery was opened 10–31 July with a bag limit of 25 salmon per head of household plus 10 salmon per each household member. A permit was required.
- 3) The *Skwentna River Personal Use Salmon Fishery Management Plan* (5 AAC 77.526) established a subsistence fish wheel fishery in the Yentna River downstream of its confluence with the Skwentna River. This fishery was implemented as a personal use fishery during the 1996 and 1997 seasons.
- 4) The *Little Susitna River Coho Salmon Management Plan* was modified to repeal the increase in bag and possession limits of coho salmon in specified areas of the Little Susitna River when the escapement goal was projected to be 7,500 nonhatchery fish upstream of the Parks Highway. The bag and possession limits of salmon other than Chinook salmon in the Little Susitna River were 3 fish per day and in possession.
- 5) At the November 1996 meeting, the BOF modified 5 AAC 61.035. Only unbaited, single-hook, artificial lures could be used in all flowing waters of the Alexander Creek drainage upstream of an ADF&G regulatory marker located 400 yards upstream of the confluence of Trail Creek.

1998

- 1) The *Upper Yentna River Subsistence Salmon Fishery* (5 AAC 01.593) established a subsistence fish wheel fishery in the Yentna River downstream of its confluence with the Skwentna River. This fishery was implemented as a personal use fishery during the 1996 and 1997 seasons. State Supreme Court and BOF action changed it to a subsistence fishery beginning in 1998. This change did not affect coho salmon harvest.

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1999

- 1) Sport fishing time on Fish, Wasilla, and Cottonwood creeks was reduced. Fishing hours were restricted from 24-hour fishing days to 12-hour fishing days (6:00 AM to 6:00 PM) in these Saturday and Sunday only fisheries. An angler could no longer fish on these streams for the remainder of the day once that angler harvested a bag limit of 3 salmon other than Chinook salmon.
- 2) In all waters of West Cook Inlet south of the Susitna River (i.e., the Chuitna, Lewis, Theodore, and McArthur rivers), once an angler harvested a bag limit of 3 coho salmon, that angler could no longer fish these streams for the remainder of the day. These same streams were closed to coho salmon fishing from 1 October to 31 December.
- 3) For the Little Susitna River, existing bait restrictions were modified to allow the use of bait during the month of September.
- 4) The *Little Susitna River Coho Salmon Management Plan* was modified. The escapement goal of 7,500 coho salmon was changed to an escapement range of 9,600–19,200 nonhatchery fish.

2000

- 1) The coho salmon bag and possession limits in the Knik Arm (excluding the stocked coho salmon fishery in the Eklutna Tailrace) and the Susitna River were reduced to 2. The West Cook Inlet bag and possession limits north of the West Foreland were reduced to 2 daily and 4 in possession. South of the West Foreland they remained at 3 daily and 6 in possession.
- 2) Wasilla Creek, Jim Lake, Upper Jim Creek, and McRoberts Creek were closed to coho salmon fishing.
- 3) After an angler harvested a limit of coho salmon from Fish or Cottonwood creeks, that angler could not fish that same day in Fish and Cottonwood creeks in waters open to salmon fishing.

2002

- 1) In the Larson Creek drainage, sport fishing for all salmon was closed year-round in streams upstream of a marker located one-quarter mile upstream from the mouth of Larson Creek.
- 2) In the Nancy Lake Creek drainage, all salmon fishing, including catch-and-release, was closed upstream of a marker located one-quarter mile upstream from the mouth of Nancy Lake Creek.
- 3) The Clearwater and Roscoe creek drainages were closed year-round to all fishing upstream from markers located one-half mile upstream of each of their confluences with the Chinitna River.

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2002 continued

- 4) The Fish Creek personal use fishery was opened by EO when the escapement goal was projected.
- 5) Wasilla Creek was open for salmon fishing (excluding Chinook salmon) from its mouth to the Alaska Railroad Bridge, Saturday and Sunday from 6:00 AM to 6:00 PM only.
- 6) The use of bait on the Little Susitna River was eliminated 14 July, upstream of the Little Susitna Public Use Facility.

2005

- 1) An angler was no longer permitted to fish in waters open to salmon fishing the same day that angler took a limit of salmon other than Chinook salmon 16 inches or greater from Wasilla Creek.
- 2) Excluding Alexander Creek, the bag and possession limits for coho salmon on Westside Susitna streams was increased from 2 per day, 4 in possession to 3 per day, 6 in possession.
- 3) Anglers were no longer permitted to fish for “other salmon” (coho, pink, or chum salmon) 16 inches or less in waters closed to fishing for “other salmon.”

The BOF adopted the following commercial fishery regulations:

Central District Drift Gillnet Fishery Management Plan (5 AAC 21.353)

- 1) The drift fishery opens the third Monday in June or 19 June, whichever is later.
- 2) From 9 July through 15 July,
 - a) drift gillnet fishing is restricted for 2 regular fishing periods to the Kenai and Kasilof Sections and Drift Area One described below, and
 - b) in runs of over 2 million sockeye salmon to the Kenai River, there may be 1 additional 12-hour period in the Kenai and Kasilof Sections of the Upper Subdistrict and in Drift Area One.
- 3) From 16 July through 31 July,
 - a) in runs of less than 2 million sockeye salmon to the Kenai River, there will be 2 regular 12-hour fishing periods restricted to the Kenai and Kasilof Sections of the Upper Subdistrict and Drift Area One;
 - b) in runs of between 2 and 4 million sockeye salmon to the Kenai River, there will be 2 regular 12-hour fishing periods restricted to the Kenai and Kasilof Sections of the Upper Subdistrict and in Drift Areas One and Two; and
 - c) in runs of over 4 million sockeye salmon to the Kenai River, there are no mandatory restrictions.

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2005 continued

- 4) From 11 August until closed by emergency order,
 - a) Drift Areas Three and Four are open for regular periods, and
 - b) Chinitna Bay may be opened by emergency order.

The new drift fishing areas were as follows:

- 1) Drift Area One—includes those waters of the Central District south of Kalgin Island at lat 60°20.43'N.
- 2) Drift Area Two—includes those waters of the Central District enclosed by a line from lat 60°20.43'N, long 151°54.83'W to a point at lat 60°41.08'N, long 151°39.00'W to a point at lat 60°41.08'N, long 151°24.00'W to a point at lat 60°27.10'N, long 151°25.70'W to a point at lat 60°20.43'N, long 151°28.55'W.
- 3) Drift Area Three—includes those waters of the Central District within 1 mile of mean lower low water (zero tide) south of a point on the West Foreland at lat 60°42.70'N, long 151°42.30'W.
- 4) Drift Area Four—includes those waters of the Central District enclosed by a line from lat 60°04.70'N, long 152°34.74'W to the Kalgin Buoy at lat 60°04.70'N, long 152°09.90'W to a point at lat 59°46.15'N, long 152°18.62'W to a point on the western shore at lat 59°46.15'N, long 153°00.20'W, not including the waters of the Chinitna Bay Subdistrict.

Other commercial fishery regulatory changes included the following:

- 1) Up to 50 fathoms of the 150 fathoms of allowable drift gillnet gear per boat may be monofilament mesh, and monofilament gear must be registered with ADF&G prior to use.
- 2) Spotter planes were allowed during the fishing period.
- 3) The pink salmon fishery during even years was reauthorized; the mesh size restriction was removed.
- 4) Up to 35 fathoms of set gillnet gear per permit may be monofilament mesh with no more than 1 net per permit having monofilament mesh, and monofilament gear must be registered with ADF&G prior to use.

2011

- 1) In the fresh water of Cook Inlet, a coho salmon removed from the water must be retained, and no angler was permitted to remove a coho salmon from the water if it was intended for release.
- 2) The bag and possession limits for coho salmon were increased from 2 to 3 in streams of the West Cook Inlet north of West Forelands to the Susitna River. Streams within in this area include the Chuitna, Theodore, and Lewis rivers, and tributaries of the Beluga River.

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2011 continued

- 3) The bag and possession limits for coho salmon were increased from 2 to 3 in all streams within Units 3, 5, and 6 of the Susitna River drainage:
 - a) Talkeetna River streams (Unit 5) include Clear, Larson, and Prairie creeks.
 - b) Chulitna River streams (Unit 6) include Byers, Honolulu, and Troublesome creeks, and the East Fork Chulitna River.
 - c) Upper Susitna streams (Unit 3) include Indian and Portage creeks.
- 4) The *Central District Drift Gillnet Fishery Management Plan* was modified during the 2011 BOF meeting to include a preamble that the drift gillnet fishery was to be managed to minimize the harvest of Northern District and Kenai River coho salmon in order to provide sport and guided sport fishermen a reasonable opportunity to harvest these salmon stocks over the entire run, as measured by the frequency of inriver restrictions. The expanded Kenai and Kasilof corridors were also created in 2011 and used as follows:
 - a) The drift fishery was to be opened the third Monday in June or 19 June, whichever was later.
 - b) From 9 July through 15 July,
 - i. fishing during the first regular period was restricted to the Expanded Kenai and Expanded Kasilof sections, and additional fishing time was restricted to these areas,
 - ii. fishing during the second regular fishing period was restricted to the Kenai and Kasilof sections of the Upper Subdistrict and Drift Area One, and
 - iii. at run strengths greater than 2.3 million, 1 additional fishing period could be allowed in the Kenai and Kasilof sections of the Upper Subdistrict and Drift Area One.
 - c) From 16 July through 31 July,
 - i. at run strengths less than 2.3 million sockeye salmon to the Kenai River, fishing during 1 regular period was to be restricted to the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict and Drift Area One,
 - ii. at run strengths of 2.3–4.6 million sockeye salmon to the Kenai River, fishing during 1 regular 12-hour fishing period per week was to be restricted to either or both the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict or Drift Area One,
 - iii. at run strengths greater than 4.6 million, there was to be no mandatory restrictions during regular fishing periods.
 - d) From 16 August until closed by emergency order, Drift Gillnet Areas Three and Four were to be open for fishing during regular fishing periods.
 - e) From 11 August through 15 August, there were no mandatory area restrictions to regular periods, except that if the Upper Subdistrict set gillnet fishery was closed under 5 AAC 21.301(b)(2)(C)(iii), regular fishing periods would be restricted to Drift Gillnet Areas Three and Four.

1989

- 1) The BOF adopted a proposal to establish a bag limit of 10 per day, 10 in possession on northern pike in Susitna–West Cook Inlet Area.

1997

- 1) Sport fishing for northern pike using 5 lines was allowed in specified lakes of the Susitna–West Cook Inlet Area provided the following was observed: hooks are single hooks with a gap between the point and shank no smaller than three-quarters inch, the lines are closely attended, and all species of fish other than northern pike are immediately released. Specified lakes include Alexander Lake, Sucker Lake, Trapper Lake, Flathorn Lake, Whiskey Lake, Hewitt Lake, Donkey Lake, Three Mile Lake (Beluga area), Neil Lake, Kroto Lake, and lakes of the Nancy Lake Recreation Area, excluding Nancy and Big No Luck lakes.
- 2) The 10-fish bag and possession limits on northern pike in the Susitna–West Cook Inlet Area were repealed.

1998

- 1) A slot limit was established for northern pike in Alexander and Trapper lakes. No bag and possession limits were in effect for northern pike less than 22 inches in length. Retention of northern pike between 22 inches and 30 inches in length was not allowed. The bag and possession limits for northern pike 30 inches or greater in length were 1 per day and 1 in possession. Additionally, the action taken for Alexander and Trapper lakes reduced the number of lines allowed when fishing through the ice for northern pike from 5 lines to 2 lines, and prohibited the use of spears and bow and arrows for taking of northern pike.
- 2) The use of bow and arrow was allowed for taking northern pike in NCI waters.
- 3) The three-quarter-inch single-hook size restriction was eliminated when fishing through the ice on select northern Cook Inlet lakes where 5 lines were allowed.

2002

- 1) The use of 5 lines while ice fishing for northern pike applied to 7 additional lakes in Northern Cook Inlet: Trapper Lake, Big No Luck Lake, Figure Eight Lake, Cabin Lake, Lower Vern Lake, Upper Vern Lake, and Lockwood Lake. On Trapper Lake, the “slot limit” for northern pike was eliminated; bait, multiple hooks, spears, and bow and arrow gear were allowed. For the purposes of sport fishing, legal bow and arrow gear included crossbows. When fishing through the ice for northern pike, anglers were allowed to use 2 hooks on a single line, provided that both hooks were attached to a single piece of bait.

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2009

- 1) BOF met out of cycle in April 2009. The slot limit regulation on Alexander Lake was replaced with a size limit regulation. Under the new regulation, there were no bag or possession limits on all northern pike less than 27 inches, but only 1 pike larger than 27 inches was allowed per day and in possession.

2011

- 1) The BOF met in February 2011 and repealed the size limit for northern pike on Alexander Lake; no bag, possession, or size limit was imposed year round. Bow-and-arrow and spears to take northern pike were allowed, as in other areas of NCI.
- 2) Anglers were allowed to fish for northern pike through the ice on Big and Nancy lakes under the following specific guidelines:
 - a) Five lines are allowed from 1 November to 15 March.
 - b) Fishing is only allowed 8:00 AM–5:00 PM. Current regulations for other species within these lakes did not change and anglers fishing for other species may fish outside hours designated for northern pike.
 - c) Hook gap must be at least three-quarters inch from point to shank.
 - d) Two single hooks are allowed per line so long as both hooks are attached to the same piece of bait.
 - e) A whole, legally recognized bait fish such as a herring or smelt must be used if fishing with bait.
 - f) Bait must be suspended above the bottom of the lake.
 - g) All lines must be closely attended.
 - h) All fish except northern pike must be immediately released unharmed.
- 3) In the Susitna River drainage, including all westside tributaries and waters of the eastside Susitna River north of Willow Creek, and in all West Cook Inlet area waters, northern pike were not allowed to be released back into the water alive. Further, anglers were allowed to choose to either discard dead northern pike in a responsible manner or harvest their catch.

**APPENDIX C: MANAGEMENT PLANS AND POLICIES
THAT IMPACT NORTHERN COOK INLET
MANAGEMENT AREA FISHERIES**

Appendix C1.–Management plans and policies that impact Northern Cook Inlet management area fisheries.

5 AAC 21.363. UPPER COOK INLET SALMON MANAGEMENT PLAN (UCISMP)

UCISMP provides long-term direction to the Alaska Board of Fisheries for allocation and conservation of fisheries involving Upper Cook Inlet (UCI) salmon stocks. The plan defines UCI salmon stocks as those that move through the Northern and Central Districts and spawn in waters draining into those districts. Various “step down” management plans relate to the UCISMP and provide specific direction to fishery managers regarding user groups, time, area, or species.

The UCISMP established the following provisions for the management and conservation of UCI salmon stocks:

- 1) Provide for a subsistence priority.
- 2) Harvest of UCI salmon will be governed by specific and comprehensive management plans.
- 3) In adopting these plans, the following will be considered: need for subsistence, protection of fisheries habitat, and the needs and demands of user groups.
- 4) The management plans may address the need to allocate harvestable surplus among commercial, sport, guided sport, and personal use fisheries and the need to allocate the harvestable surplus within user groups.
- 5) In the absence of a specific management plan, salmon shall be harvested in the fisheries that have historically harvested them.
- 6) In the absence of a specific management plan, the burden of conservation shall be shared among all user groups in close proportion to their respective harvest.

5 AAC 01.560. TYONEK SUBSISTENCE FISHERY

The Tyonek Subsistence Fishery provides subsistence fishing opportunity primarily to residents of the village of Tyonek. Fish harvested in this fishery are bound for NCIMA. Specific fishing periods occur from 15 May through 15 October. A harvest quota of 4,200 Chinook salmon was removed in 2011 and replaced with a bag and possession limit of 25 salmon for the head of a household and 10 salmon for each dependent of the permit holder. The amount necessary for subsistence (ANS) for this fishery is 2,700 Chinook salmon and 150–500 non-Chinook salmon.

5 AAC 21.368. BIG RIVER SOCKEYE SALMON MANAGEMENT PLAN

The *Big River Sockeye Salmon Management Plan* authorizes a harvest of Big River salmon by set gillnets in the Kustatan Subdistrict of the Central District. Sockeye salmon is the targeted species. This fishery extends from 1 June through 24 June on Monday, Wednesday, and Friday from 7:00 AM to 7:00 PM. It is subject to emergency closure when the incidental harvest of Chinook salmon exceeds 1,000 fish. At the 2005 BOF meeting, the plan was amended to expand fishing to a portion of the Kalgin Island Subdistrict along the western shore from Light Point to the Kalgin Island Light on the southern end of the island.

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5 ACC 21.353. CENTRAL DISTRICT DRIFT GILLNET FISHERY MANAGEMENT PLAN

The *Central District Drift Gillnet Fishery Management Plan* was partitioned from the Northern District Salmon Management Plan during the 2005 BOF meeting. Management of the drift gillnet fishery is dependent on the run strength of sockeye salmon to the Kenai River. The plan was modified during the 2011 BOF meeting to include a preamble that the drift gillnet fishery was to be managed to minimize the harvest of Northern District and Kenai River coho salmon in order to provide sport and guided sport fishermen a reasonable opportunity to harvest these salmon stocks over the entire run, as measured by the frequency of inriver restrictions. The plan included the following:

- 1) The drift fishery opens the third Monday in June or 19 June, whichever is later.
- 2) From 9 July through 15 July, fishing during the first regular period is restricted to the Expanded Kenai and Expanded Kasilof sections; additional fishing time is restricted to these areas. Fishing during the second regular fishing period is restricted to the Kenai and Kasilof sections of the Upper Subdistrict and Drift Area One. At run strengths greater than 2.3 million, 1 additional fishing period may be allowed in the Kenai and Kasilof sections of the Upper Subdistrict and Drift Gillnet Area One.
- 3) From 16 July through 31 July, at run strengths less than 2.3 million sockeye salmon to the Kenai River, fishing during 1 regular period will be restricted to the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict and Drift Area One. At run strengths of 2.3–4.6 million sockeye salmon to the Kenai River, fishing during 1 regular 12-hour fishing period per week will be restricted to either or both the Expanded Kenai and Expanded Kasilof sections of the Upper Subdistrict or Drift Area One. At run strengths greater than 4.6 million, there will be no mandatory restrictions during regular fishing periods.
- 4) From 16 August until closed by emergency order, Drift Gillnet Areas Three and Four are open for fishing during regular fishing periods.
- 5) From 11 August through 15 August, there are no mandatory area restrictions to regular periods, except that if the Upper Subdistrict set gillnet fishery is closed under 5 AAC 21.301(b)(2)(C)(iii), regular fishing periods will be restricted to Drift Gillnet Areas Three and Four.

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5 AAC 21.358. NORTHERN DISTRICT SALMON MANAGEMENT PLAN

The *Northern District Salmon Management Plan* provides the following management guidelines:

- 1) Minimize the harvest of coho salmon bound for the Northern District of UCI.
- 2) Manage the Northern District commercial salmon fisheries based on abundance of sockeye salmon counted through the weirs on Larson, Chelatna, and Judd lakes or other salmon indices.
- 3) From 20 July through 6 August, if ADF&G's assessment of abundance indicates that restrictions are necessary to achieve the escapement goal, the commissioner may, by emergency order, close the commercial set gillnet fishery in the Northern District and immediately reopen a season during which the number of set gillnets that may be used is limited to the following options selected at the discretion of the commissioner, except that from 31 July through 6 August, the commissioner may allow the use of 2 set gillnets in that portion of the General District south of the Susitna River.
- 4) Manage the Northern District commercial salmon fisheries to minimize the incidental take of coho salmon stocks bound for the Northern District.
- 5) Personal use fishing with a set gillnet is prohibited in the Northern District.
- 6) Directs ADF&G to conduct habitat assessments to determine loss of riparian habitat by noncommercial fishermen.

5 AAC 21.354. COOK INLET PINK SALMON MANAGEMENT PLAN

The *Cook Inlet Pink Salmon Management Plan* adopted in 2002 and amended in 2005 and 2011, provides for even year pink salmon returns to be managed primarily for commercial uses while minimizing the harvest of Northern District and Kenai River coho salmon stocks. A commercial pink salmon fishery is authorized if the sockeye salmon escapement goals in the Kenai and Kasilof rivers are being achieved and if coho salmon run strength is sufficient to withstand additional harvest.

The first period will occur only if during the regular fishing periods from 6 August through 10 August, the daily harvest of pink salmon exceeds 50,000 fish or the cumulative harvest is 10,000 or more pink salmon. The second pink salmon commercial fishing period will occur only if 50,000 or more pink salmon and no more than 2,500 coho salmon are harvested during the first pink salmon commercial fishing period.

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5 AAC 21.366. NORTHERN DISTRICT KING SALMON MANAGEMENT PLAN

The *Northern District King Salmon Management Plan* was adopted in 1985 and amended in 2005, 2008, and 2011 by the BOF. This plan provides for the management of the commercial harvest of Chinook salmon in the Northern District as follows:

- 1) The season runs from the first Monday on or after 25 May through 24 June (4–5 periods, depending on the calendar year); fishing was restricted to 3 periods until 2008.
- 2) Fishing periods were extended from 6 hours to 12 hours (7:00 AM to 7:00 PM) in 2005; periods occur on Mondays.
- 3) Harvest is capped at 12,500 Chinook salmon.
- 4) Set gillnets may not exceed 35 fathoms in length and 6 inches in mesh size.
- 5) No Commercial Fisheries Entry Commission (CFEC) permit holder may operate more than 1 set gillnet at a time.
- 6) No net shall be set within 1,200 feet of another.
- 7) No net shall be placed seaward of another.
- 8) From 25 May through 24 June, the area from 1 mile south of the Theodore River to the Susitna River is open the second regular Monday only.
- 9) If either the Theodore, Lewis, or Ivan River is closed to sport fishing, the area 1 mile south of the Theodore River to the Susitna River will be closed to commercial Chinook salmon fishing for the remainder of the season by emergency order.
- 10) If the Deshka River is closed to sport fishing, the commercial Chinook salmon fishery throughout the Northern District will close for the remainder of the season by emergency order.
- 11) If the Chuitna River is closed to sport fishing, the area from a point at the wood chip dock (located about 4.5 miles south of the Chuitna River) to the Susitna River will be closed to commercial Chinook salmon fishing by emergency order for the remainder of the season.

Note that although not directly part of this plan, the gear restriction (5 AAC 21.331[d][2]) of 2 nets from 1 August to 10 August was repealed during the January 2005 BOF meeting.

5 AAC 21.370. PACKERS CREEK SOCKEYE SALMON MANAGEMENT PLAN

The *Packers Creek Sockeye Salmon Management Plan* directs ADF&G not to base commercial fishing time in the Kalgin Island Subdistrict on enhanced run strength of Packers Creek sockeye salmon. The plan limits extra fishing time to no more than 1 additional fishing period per week.

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5 AAC 75.210. SPECIAL MANAGEMENT AREAS AND LIBERAL HARVEST OPPORTUNITIES FOR TROUT (previously titled *Criteria for Establishing Special Management Areas for Trout*)

The *Special Management Areas and Liberal Harvest Opportunitites for Trout* was adopted by the BOF in November 1996 from the Cook Inlet and Copper River Basin Rainbow–Steelhead Trout Management Policy. These criteria provide future BOF, ADF&G managers, and the sport fishing public with the following:

- 1) management policies and implementation directives for Cook Inlet rainbow and steelhead trout
- 2) a systematic approach to developing sport fishing regulations that includes a process for rational selection of waters for such special management as catch-and-release, trophy areas, and high yield fisheries

The *Statewide Management Standards for Wild Trout* (5 AAC 75.220), effective November 2003, directs ADF&G to manage wild stocks of rainbow trout for optimal sustained yield, based on management objectives that maximize the benefits of the fisheries while maintaining genetic diversity, biologically desirable size composition, and abundance levels of wild stock that do not require stocking for enhancement or supplementation.

Due to concerns over lack of stock status information and the potential for increased angler effort on wild stocks, the potential for loss of fishing opportunity, and the potential for over-exploitation, the BOF intends to manage wild rainbow trout stocks conservatively. Conservative management for areas of the state, other than Southeast Alaska, means bag and possession limits of 2 fish, of which only 1 may be 20 inches or greater in length, with an annual limit of 2 fish 20 inches or greater in length.

Note that no changes to NCI wild rainbow trout regulations were made during the 2005 BOF meeting with respect to statewide management standards because regulations within the NCIMA already complied with these standards.

5 AAC 77.540. UPPER COOK INLET PERSONAL USE SALMON FISHERY MANAGEMENT PLAN

The *Upper Cook Inlet Personal Use Salmon Fishery Management Plan* establishes time, area, methods, and means for taking salmon for personal use. This plan first went into effect during the 1996 season. Salmon harvest opportunity was established to replace the harvest opportunity previously provided through the *Upper Cook Inlet Subsistence Salmon Management Plan*, which was repealed by the BOF in 1995. The plan provides for personal use dip net fisheries in the Kenai and Kasilof rivers and Fish Creek. Limited personal use gillnet fishing opportunity is provided near the terminus of the Kasilof River. The personal use fishery at Fish Creek may open by emergency order from 10 July through 31 July if ADF&G projects the escapement of sockeye salmon will be more than 50,000 fish.

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5 AAC 01.593. UPPER YENTNA RIVER SUBSISTENCE SALMON FISHERY

The Upper Yentna River subsistence salmon fishery establishes a subsistence fish wheel fishery for salmon other than Chinook salmon in the Yentna River downstream of its confluence with the Skwentna River to the confluence of Martin Creek. This fishery was implemented as a personal use fishery during the 1996 and 1997 seasons. State Supreme Court and BOF actions changed it to a subsistence fishery beginning in 1998. A harvest quota of 2,500 salmon other than Chinook salmon was removed in 2011 and replaced with bag and possession limits of 25 salmon for the head of a household and 10 salmon for each dependent of the permit holder. The ANS for this fishery is 400–700 salmon other than Chinook salmon.

Fisheries for other species not covered by the above management plans or policies are managed to assure sustained yield of the targeted fish stock while assuring the continued, and where possible, the expanded opportunity to participate in the fishery.

SUSITNA BASIN RECREATION RIVERS ACT

In the spring of 1988, the Alaska legislature passed the *Recreation Rivers Act* (Sec. 41.23.400) and assigned oversight responsibilities related to this act to the Alaska Department of Natural Resources (DNR). This act established 6 recreational rivers: Little Susitna River, Deshka River (including Moose and Kroto creeks), Talkeetna River, Lake Creek, Talachulitna River, and Alexander Creek. The legislation was enacted to insure that all state lands and waters within the 6 river corridors are maintained and enhanced for recreation and wildlife purposes. A 2-year planning process was completed, which included input from affected individuals, groups, agencies, and officials throughout the area. The plan (DNR 1991) was adopted as DNR policy in spring 1991 following legislative review of the document. Regulations associated with the plan were available for public comment through 7 January 1994. Regulations went into effect for the 1996 season, but no funds have been allocated for enforcement.

APPENDIX D: EMERGENCY ORDERS

1994

- 1) EO No. 2-RS-2-28-94 opened the Fish Creek personal use fishery. The dip net fishery opened 9:00 AM on 27 July and closed midnight on 5 August, except the fishery was closed 29 July and 2 August.
- 2) EO No. 2-RS-2-33-94 superseded EO 2-RS-2-28-94, extending the Fish Creek personal use dip net fishery through midnight 9 August, effective 7–9 August.
- 3) EO No. 2-KS-2-05-94 closed to fishing that portion of the Little Susitna River from the ADF&G fish counting weir located at river mile 32.5 downstream for a distance of 1,500 feet, effective 25 May through 15 September.
- 4) EO No. 2-SS-2-32-94 increased the bag and possession limits to 5 coho salmon at the Little Susitna River downstream from the ADF&G counting weir at river mile 32.5, effective 6 August through 31 December.
- 5) EO No. 2-SS-2-29-94 closed that portion of Jim Creek to fishing from the ADF&G fish counting weir located at river mile 1 downstream for a distance of 1,000 feet, effective 26 July through 1 November.
- 6) EO No. 2-KS-2-02-94 reduced the Chinook salmon possession limit to 1 fish and eliminated the use of bait in the Deshka River, effective 1 May through 13 July.
- 7) EO No. 2-KS-2-13-94 closed all waters of the Deshka River drainage to sport fishing for Chinook salmon and prohibited the use of bait in the following waters of the Susitna River drainage: 1) all waters of the Susitna River drainage downstream of the Deshka River that flow into the Susitna River from the east and the Alexander Creek drainage, 2) all waters of the Yentna River drainage, 3) all waters of the Talkeetna River drainage, and 4) all waters of the Chulitna River drainage, effective 17 June through 13 July.

1995

- 1) EO No. 2-KS-2-07-95 closed to fishing that portion of the Little Susitna River from the fish counting weir located at river mile 32.5 downstream for a distance of 1,900 feet, effective 25 May through 15 September.
- 2) EO No. 2-KS-2-08-95 established a possession limit of 1 Chinook salmon 16 inches or more in length in the Little Susitna River, effective 24 May through 15 September.
- 3) EO No. 2-KS-2-21-95 opened Willow Creek from its mouth upstream to the Parks Highway Bridge and all waters within a one-quarter mile radius of Willow Creek's confluence with the Susitna River to Chinook salmon fishing, effective 12:01 AM through midnight on Tuesday, 4 July.

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1995 continued

- 4) EO No. 2-RS-02-32-95 opened the Fish Creek personal use fishery. The dip net fishery opened 5:00 AM on 26 July and closed midnight on 8 August, except the fishery was closed 28 July, 1 August, and 4 August.
- 5) EO No. 2-SS-02-40-95 increased the bag and possession limits to 5 coho salmon at the Little Susitna River downstream from the ADF&G fish counting weir at river mile 32.5, effective 9 August through 31 December.

1996

- 1) EO No. 2-KS-2-27-96 opened Willow, Little Willow, Sheep, and Montana creeks from their mouths upstream to the Parks Highway Bridge and all waters within a one-quarter mile radius of their confluence with the Susitna River to Chinook salmon fishing effective 12:01 AM on Thursday, 4 July through midnight Sunday, 7 July.

1997

- 1) EO No. 2-KS-2-15-97 opened the Deshka River from the mouth to approximately 2 miles upstream and within a one-quarter mile radius of the Susitna River confluence to fishing for Chinook salmon over 16 inches in length from 6:00 AM through 11:00 PM daily through 13 July.
- 2) EO No. 2-KS-2-18-97 opened eastside Susitna River streams to Chinook salmon fishing on 4 July.
- 3) EO No. 2-RS-2-25-97 closed Fish Creek to dipnetting from 11:00 AM on 23 July through 11:00 PM on 25 July.
- 4) EO No. 2-RS-2-28-97 closed Fish Creek to dipnetting for the remainder of the 1997 season on 26 July.
- 5) EO No. 2-SS-02-31-97 prohibited use of bait and reduced daily bag and possession limits of coho salmon to 1 in all waters of Cook Inlet on 9 August. Areas not included were Eklutna Tailrace, and Ship, Bird, and Campbell creeks.
- 6) EO No. 2-SS-2-34-97 closed Wasilla Creek downstream from the railroad bridge, including Rabbit Slough and Spring Creek, to sport fishing, 23 August through 31 October.

1998

- 1) EO No. 2-KS-2-08-98 established for the Deshka River that upon harvesting a Chinook salmon 16 inches or more in length, an angler must quit fishing for Chinook salmon for the remainder of the day. This clarified a regulation that went into effect when the Deshka River was opened to Chinook salmon fishing for the 1998 season.
- 2) EO No. 2-KS-2-09-98 opened Willow Creek to Chinook salmon fishing 20–22 June.

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1998 continued

- 3) EO No. 2-KS-2-12-98 added Friday, 3 July as a day open to Chinook salmon fishing in that portion of the Susitna River drainage upstream from its confluence with the Deshka River to its confluence with the Talkeetna River including Susitna River tributaries from Willow Creek to Trapper Creek.
- 4) EO No. 2-KS-2-14-98 closed the Deshka River to all fishing 1,200 feet downstream and 300 feet upstream of the ADF&G fish counting weir.
- 5) EO No. 2-RS-2-15-98 closed Fish Creek to dipnetting, effective 25–31 July.

1999

- 1) EO No. 2-KS-2-05-99 closed the Deshka River to fishing from 1,000 yards downstream to 200 yards upstream of the ADF&G fish counting weir.
- 2) EO No. 2-KS-2-07-99 allowed the use of bait in the first 17 miles of the Deshka River and within a one-quarter mile radius of the mouth of the Deshka River with the Susitna River, 22 June through 13 July.
- 3) EO No. 2-KS-2-11-99 opened Willow, Little Willow, Sheep, and Montana creeks to Chinook salmon fishing for an additional weekend, 10 July through 12 July.
- 4) EO No. 2-RS-2-15-99 closed Fish Creek to dipnetting on 26 July.
- 5) EO No. 2-SS-2-20-99 reduced the bag limit to 1 coho salmon and no bait for Cottonwood, Wasilla, and Fish creeks, and the Little Susitna River on 19 August.

2000

- 1) EO No. 2-KS-2-04-00 closed the Deshka River to fishing from 1,000 yards downstream to 200 yards upstream of the ADF&G fish counting weir.
- 2) EO No. 2-KS-2-05-00 allowed the use of bait in the first 17 miles of the Deshka River and within a one-quarter mile radius of the mouth of the Deshka River with the Susitna River, 8 June through 13 July.
- 3) EO No. 2-KS-2-11-00 opened Willow, Little Willow, Sheep, and Montana creeks to Chinook salmon fishing for an additional day on 4 July.
- 4) EO No. 2-KS-2-12-00 opened the east fork of the Chulitna River, and Willow, Little Willow, Sheep, and Montana creeks to Chinook salmon fishing for an additional 3-day weekend, 8 July through 10 July.
- 5) EO No. 2-SS-2-17-00 established for waters below river mile 32.5 of the Little Susitna River that after keeping 2 coho salmon, an angler must quit fishing in the Little Susitna River for the remainder of the day, 28 July through 31 December.
- 6) EO No. 2-RS-2-16-00 closed Fish Creek to dipnetting on 26 July.

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2001

- 1) EO No. 2-KS-2-03-01 closed the Deshka River to fishing from 1,000 yards downstream to 200 yards upstream of the ADF&G fish counting weir.
- 2) EO No. 2-KS-2-04-01 allowed the use of bait in the first 17 miles of the Deshka River and within a one-quarter mile radius of the mouth of the Deshka River with the Susitna River, 12 June through 13 July.
- 3) EO No. 2-KS-2-09-01 extended Chinook salmon fishing on the Chulitna River downstream of the cable crossing 1 July through 5 July.
- 4) EO No. 2-KS-2-13-01 opened Willow Creek to Chinook salmon fishing on 29 June at 12:01 AM.
- 5) EO No. 2-KS-2-15-01 extended the Chinook salmon season in the Susitna River drainage upstream from its confluence with the Deshka River to its confluence with the Talkeetna River, including the Susitna River tributaries from Willow Creek to Trapper Creek and the east fork of the Chulitna River (including the first one-quarter mile of Honolulu Creek only). These waters, which were scheduled to close on Monday, 2 July, were opened through Wednesday, 4 July at 12:00 midnight.
- 6) EO No. 2-RS-2-17-01 closed Fish Creek to dipnetting on 12 July at 11:00 PM.

2002

- 1) EO No. 2-KS-2-03-02 increased the possession limit to 2 Chinook salmon in all Westside Susitna River tributaries except Alexander Creek.
- 2) EO No. 2-KS-2-02-02 opened the entire Theodore and Lewis rivers to catch-and-release for Chinook salmon through 30 June, limited to single hook, no bait.
- 3) EO No. 2-KS-2-04-02 closed the Deshka River to fishing from 1,000 yards downstream to 200 yards upstream of the ADF&G fish counting weir.
- 4) EO No. 2-KS-2-05-02 allowed the use of bait in the first 17 miles of the Deshka River and within a one-quarter mile radius of the mouth of the Deshka River with the Susitna River, 8 June through 13 July.
- 5) EO No. 2-KS-2-17-02 extended the Chinook salmon season in Willow, Sheep, and Montana creeks 3 days from 5 to 7 July, 6:00 AM to 11:00 PM, daily.
- 6) EO No. 2-SS-2-29-02 increased the coho salmon bag limit in Fish Creek to 3 per day and allowed 24-hour per day fishing on Saturdays and Sundays, beginning 17 August at 12:01 AM through 31 December.

2003

- 1) EO No. 2-KS-2-01-03 closed the Deshka River to fishing from 1,000 yards downstream to 200 yards upstream of the ADF&G fish counting weir.

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2003 continued

- 2) EO No. 2-KS-2-05-03 increased the bag and possession limits of Chinook salmon greater than 20 inches in the Deshka River from 1 per day and 2 in possession to 2 per day and 4 in possession.
- 3) EO No. 2-KS-2-07-03 rescinded EO 2-KS-2-01-03.
- 4) EO No. 2-KS-2-12-03 extended the Chinook salmon season in Willow, Sheep, and Montana creeks 3 days from 4–6 July, 6:00 AM to 11:00 PM, daily.

2004

- 1) EO No. 2-RS-2-18-04 prohibited the retention of sockeye salmon while sport fishing in all waters of the Yentna River drainage, beginning 4 August.
- 2) EO No. 2-KS-2-06-04 increased the daily bag and possession limits for Chinook salmon on the Deshka River from 1 per day, 2 in possession to 2 per day, 4 in possession, 12 June to 13 July.
- 3) EO No. 2-KS-2-04-04 allowed use of bait in that portion of the Deshka River open to Chinook salmon fishing, beginning 28 May.
- 4) EO No. 2-KS-2-01-04 opened Eklutna Tailrace to Chinook salmon fishing on 15 April.

2005

- 1) EO No. 2-RS-2-27-05 prohibited the retention of sockeye salmon in that portion of Fish Creek open to salmon fishing, beginning 13 August.
- 2) EO No. 2-RS-26-05 prohibited the retention of sockeye salmon while sport fishing in all waters of the Susitna River drainage, effective 24 July.
- 3) EO No. 2-KS-2-21-05 extended the Chinook salmon season in the lower 2 miles of the Deshka River from 14 July to 31 July.
- 4) EO No. 2-KS-2-03-05 increased the daily bag and possession limits for Chinook salmon on the Deshka River to 2 per day, 4 in possession, and increased fishing time to 24 hours per day, 27 May to 13 July.

2006

- 1) EO No. 2-KS-2-07-06 increased the daily bag and possession limits for Chinook salmon on the Deshka River to 2 per day, 4 in possession, and increased fishing time to 24 hours per day, 26 May to 13 July.
- 2) EO No. 2-SS-2-41-06 increased the daily bag limit of coho salmon to 3 daily in that portion of the Little Susitna River open to salmon fishing, beginning 19 August.
- 3) EO No. 2-SS-2-44-06 increased the period open to salmon fishing on Wasilla Creek to 24 hours per day while keeping the Saturday, Sunday, and weekend only restriction, and increased the bag limit for coho salmon to 3 daily in those waters open to salmon fishing, beginning 19 August.

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2006 continued

- 4) EO No. 2-SS-43-06 increased the period open to salmon (other than Chinook salmon) fishing on Fish Creek to 24 hours per day while keeping the Saturday, Sunday, and weekend only restriction, and increased the bag limit for coho salmon to 3 daily in those waters open to salmon fishing, beginning on 19 August.
- 5) EO No. 2-SS-2-42-06 increased the period open to salmon fishing on Cottonwood Creek to 24 hours per day while keeping the Saturday, Sunday, and weekend only restriction, and increased the bag limit for coho salmon to 3 daily in those waters open to salmon fishing, beginning 19 August.
- 6) EO No. 2-RS-2-258-06 prohibited retention of sockeye salmon while sport fishing in all waters of the Susitna River drainage, beginning 15 July.
- 7) EO Nos. 2-RS-2-40-06 rescinded Emergency Order No. 2-RS-2-25-06, which closed the Susitna River drainage to the retention of sockeye salmon, effective 11 August.

2007

- 1) EO No. 2-KS-2-09-07 increased the Deshka River Chinook salmon bag limit to 2 fish over 20 inches and allowed fishing 24 hours per day, effective 25 May.
- 2) EO No. 2-SS-2-36-07 prohibited retention of coho salmon while sport fishing in the Kink Arm Management Area, excluding Eklutna Tail Race and Fish Creek, effective 4 September.
- 3) EO No. 2-SS-2-37-07 rescinded EO No. 2-SS-2-36-07 on 11 September.
- 4) EO No. 2-RS-2-35-07 prohibited retention of sockeye salmon while sport fishing in all waters of the Susitna River drainage, effective 11 August.

2008

- 1) EO No. 2-KS-2-08-08 prohibited use of bait on the Deshka River, effective 14 June.
- 2) EO No. 2-KS-2-12-08 closed Deshka to Chinook salmon fishing, effective 20 June.
- 3) EO No. 2-SS-2-26-08 increased the bag limit for coho salmon to 3 per day in that portion of the Knik Arm open to salmon fishing excluding Jim Creek, beginning 16 August.

2009

- 1) EO No. 2-KS-2-06-09 prohibited bait on the Deshka River and limited harvest to Saturdays through Mondays (catch-and-release only on Tuesdays through Fridays), effective 15 May.
- 2) EO No. 2-KS-2-09-09 closed the Deshka River to Chinook salmon fishing, effective 13 June.
- 3) EO No. 2-KS-2-20-09 closed the Little Susitna River to Chinook salmon fishing and closed the last 3 day weekend of fishing within Unit 2 of the Susitna River, effective 3 July.

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2009 continued

- 4) EO No. 2-SS-2-27-09 increased the bag limit for coho salmon to 3 per day in that portion of the Knik Arm open to salmon fishing, except the Little Susitna River, beginning 19 August. Mondays were added to the weekend fisheries of Cottonwood, Wasilla, and Fish creeks.

2010

- 1) EO No. 2-KS-2-09-10 closed the Chuitna, Theodore, and Lewis rivers to Chinook salmon fishing, effective 15 May.
- 2) EO No. 2-KS-2-14-10 prohibited use of bait on the Deshka River, effective 12 June.
- 3) EO No. 2-KS-2-22-10 rescinded EO 2-KS-2-14-10, effective 19 June.
- 4) EO No. 2-KS-2-24-10 reduced the annual limit to 1 Chinook salmon over 20 inches in Unit 4 (Yentna River drainage), effective 26 June.
- 5) EO No. 2-KS-2-31-10 reduced the annual limit to 1 Chinook salmon over 20 inches in Units 5 and 6 (Talkeetna and Chulitna river drainages), effective 2 July.
- 6) EO No. 2-KS-2-30-10 closed the Little Susitna River to Chinook salmon fishing and closed the last 2 weekends of fishing within Unit 2 of the Susitna River, effective 2 July.
- 7) 2-SS-2-42-10 increased the bag limit for coho salmon to 3 per day in that portion of the Knik Arm open to salmon fishing, except Jim Creek and the Little Susitna River, beginning 7 August.
- 8) 2-RS-2-38-10 opened the Fish Creek Personal Use Dip Net fishery for salmon other than Chinook salmon only between the hours of 6:00 AM and 11:00 PM, starting 6:00 AM on 24 July and ending 11:00 PM on 31 July.

2011

- 1) EO No. 2-KS-2-09-11 closed the Little Susitna River to Chinook salmon fishing, effective 17 June.
- 2) 2-SS-2-26-11 prohibited the use of bait on the Little Susitna River, effective 12:01 AM, Saturday, 6 August through 11:50 PM, Friday, 20 September.
- 3) 2-SS-2-27-11 closed all waters of the Knik Arm Management Area, excluding Eklutna Tailrace and Fish Creek, to fishing for coho salmon, effective 12:01 AM, Saturday, 27 August.

2012

- 1) 2-KS-2-06-12 reduced the annual limit for Chinook salmon 20 inches or longer from 5 fish to 2 fish and limited sport fishing gear to 1 unbaited, single hook, artificial lure in the Susitna River drainage, effective 6:00 AM, Tuesday, 15 May.
- 2) 2-KS-2-07-12 reduced the annual limit for Chinook salmon 20 inches or longer from 5 fish to 2 fish and limited sport fishing gear to 1 unbaited, single hook, artificial lure in the Little Susitna River drainage, effective 6:00 AM, Tuesday, 15 May through 11:59 PM, Friday, 13 July.

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2012 continued

- 3) 2-KS-2-14-12 closed the Little Susitna River to fishing for Chinook salmon, effective 6:00 AM, Friday, 15 June through 11:59 PM, Friday, 13 July.
- 4) 2-KS-2-15-12 prohibited the use of bait and limited sport fishing gear to 1 unbaited, single-hook artificial lure while sport fishing in the Deshka River, effective 6:00 AM, Wednesday, 20 June through 11:00 PM, Friday, 13 July.
- 5) 2-KS-2-20-12 closed the Susitna River drainage to sport fishing for Chinook salmon and limited sport fishing gear to 1 unbaited, single hook, artificial lure when fishing in waters normally opened to Chinook salmon fishing, effective 6:00 AM, Monday, 25 June through 11:59 PM, Friday, 13 July.
- 6) 2-RT-2-31-12 increased the possession limit for rainbow trout in Reflections Lake to 5 per day and 5 in possession, with only one 20 inches or greater in length, effective 6:00 AM, Friday, 6 July through 11:59 PM, Monday, 31 December.
- 7) 2-SS-2-49-12 prohibited sport fishing for coho salmon on the Little Susitna River, effective 12:01 AM, Monday, 6 August through 11:59 PM, Sunday, 30 September.
- 8) 2-SS-2-50-12 prohibited the use of bait for coho salmon on the Little Susitna River effective 12:01 AM, Monday, 6 August through 11:59 PM, Sunday, 30 September.
- 9) 2-SS-2-51-12 reduced the bag limit for coho salmon in Jim Creek from 2 fish to 1 fish only between the hours of 6:00 AM to 6:00 PM, effective 6:00 AM, Friday, 10 August.
- 10) 2-SS-2-53-12 closed all waters of the Knik Arm Management Area, excluding Eklutna Tailrace and Fish Creek, to fishing for coho salmon effective 12:01 AM, Friday, 17 August.

2013

- 1) 2-KS-2-08-13 restricted sport fishing gear to 1 unbaited, single hook, artificial lure and closed fishing for any species after harvesting a Chinook salmon greater than 20 inches in length in the Susitna River drainage, effective 6:00 AM, Tuesday, 15 May through 11:59 PM, Friday, 13 July. This EO further prohibited the retention of Chinook salmon (any size) each Tuesday, Wednesday, and Thursday (harvest allowed Fridays through Mondays) within Unit 4 (Yentna River drainage).
- 2) 2-KS-2-09-13 established a combined annual limit of 2 Chinook salmon 20 inches or greater in length for fish harvested in the Susitna River drainage and the Little Susitna River, effective 6:00 AM, Tuesday, 15 May through 11:59 PM, Friday, 13 July.
- 3) 2-KS-2-10-13 restricted sport fishing gear to 1 unbaited, single hook, artificial lure and prohibited the retention of Chinook salmon (any size) each Tuesday, Wednesday, Thursday, and Friday (harvest was allowed Saturdays through Mondays), effective 6:00 AM, Tuesday, 15 May through 11:59 PM, Friday, 13 July.

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2013 continued

- 4) 2-KS-2-18-13 decreased the waters of the Little Susitna River open to sport fishing by relocating the ADF&G regulatory marker downstream approximately 1,500 feet from the weir located at river mile 32.5, effective 6:00 AM, Friday, 14 June through 11:59 PM, Sunday, 15 September.
- 5) 2-KS-2-29-13 reinstated use of bait and multiple hooks on the Deshka River for the remainder of the season, effective 6:00 AM, Saturday, 29 June.
- 6) 2-SS-2-48-13 increased the bag and possession limits for coho salmon from 2 to 3 in Fish, Cottonwood, and Wasilla creeks, effective 12:01 AM, Saturday, 17 August through 31 December. In addition, this emergency order extended the 2-day weekend fisheries of Fish, Cottonwood, and Wasilla creeks to a 3-day fishery to take place each Saturday through Monday.
- 7) 2-SS-2-49-13 allowed sport fishing on Fish Creek 7 days per week, effective 6:00 AM, Thursday, 22 August.

**APPENDIX E: NORTH COOK INLET SPORT FISHING
GUIDES, 2013**

Appendix E1.--North Cook Inlet sport fishing guides for 2013.

| Business name | Proprietor | | City | State |
|---|------------|------------|---------------|-------|
| | First name | Last name | | |
| ABOVE ALASKA AVIATION | ANDREW | HAAG | TALKEETNA | AK |
| ACORD GUIDE SERVICE | GREGORY | ACORD | WASILLA | AK |
| ADVENTURE GUIDING | GEORGE | ORTMAN | WILLOW | AK |
| ADVENTURE OUTFITTERS ALASKA | JAKE | DOTH | NIKISKI | AK |
| ALASKA FISHING AND RAFT ADVENTURES | REINHARD | NEUHAUSER | FAIRBANKS | AK |
| ALASKA FISHING WITH MARK GLASSMAKER INC | MARK | GLASSMAKER | SOLDOTNA | AK |
| ALASKA RAINBOW LODGE | RON | HAYES | FORT WORTH | TX |
| ALASKA SAFARIS LTD | HENRIK | WESSEL | TALKEETNA | AK |
| ALASKA SALMON FISHING TRIPS | THERESA | STUDNICKA | HOUSTON | AK |
| ALASKA SPORTSMANS LODGE | BRIAN | KRAFT | ANCHORAGE | AK |
| ALASKA SUSITNA CHARTERS | GREGORY | GIAUQUE | PALMER | AK |
| ALASKA'S FISHING UNLIMITED, INC. | MARTIN | KVITENG | PORT ALSWORTH | AK |
| ALASKAN ADVENTURES GUIDE COMPANY | MATT | PAULUS | KENAI | AK |
| ALASKAN RIVER GUIDES | CURTIS | FROMBERG | KASILOF | AK |
| ALASKAS FINS AND FEATHERS GUIDE CO | DEREK | GARDNER | SOLDOTNA | AK |
| ALL ALASKA OUTDOORS INC | ROBERT | LEDDA | SOLDOTNA | AK |
| ANGLER'S ALIBI LLC | JOHN | PERRY | LAKESWOOD | CO |
| ARCTIC ADVENTURES LLC | ANTHONY | ONEY | ANCHORAGE | AK |
| BADGR'S EXTREME SPORT TOURS | MARK | BARAJAS | KENAI | AK |
| BEARTRACKS LODGE | FRANK | BARRETT | CLACKAMAS | OR |
| BIG DAVES FISHING ADVENTURES | DAVID | MANNERS | TILLAMOOK | OR |
| BILL DAVIS FISHING GUIDES | WILLIAM | DAVIS | KENAI | AK |
| BILL WERNEKE REGISTERED GUIDE | WILLIAM | WERNEKE | SOLDOTNA | AK |
| BREWERS ALASKAN GUIDE SERVICE | JOEL | BREWER | NIKISKI | AK |
| BREWERS GUIDE SERVICE | DOUGLAS | BREWER | NIKISKI | AK |
| BRISTOL BAY SPORT FISHING | JERRY | JACQUES | ILIAMNA | AK |
| CARAWAYS ALASKAN CACHE | JOE | CARAWAY | ANCHORAGE | AK |
| CAST AND BLAST | DANIEL | CHALOUX | SOLDOTNA | AK |
| CROSS HAIRS OUTFITTERS | MICHAEL | COWAN | SOLDOTNA | AK |

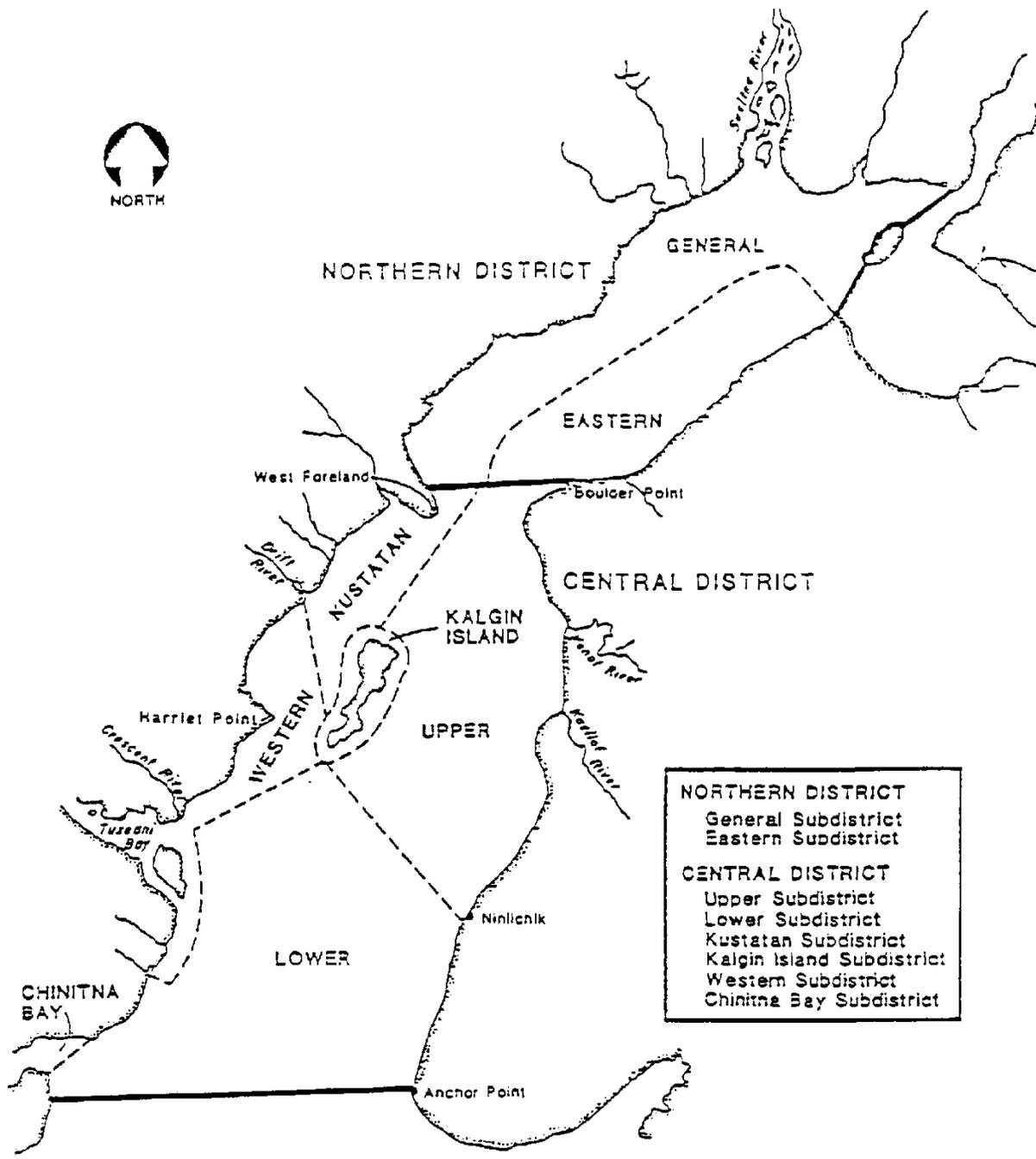
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| Business name | Proprietor | | City | State |
|--|------------|--------------|-------------|-------|
| | First name | Last name | | |
| DANS GUIDE SERVICE | DANIEL | VERKUILEN | KENAI | AK |
| DAVE FISH ALASKA | DAVID | FISH | TALKEETNA | AK |
| DENALI FLY FISHING GUIDES LLC | RICHARD | MCMAHAN | CANTWELL | AK |
| DESHKA LANDING LODGE | LINDA | NORTH | WILLOW | AK |
| DESHKA WILDERNESS LODGE | MICHAEL | YENCHA | WILLOW | AK |
| ERIC LOOMIS FISHING ALASKA | ERIC | LOOMIS | SOLDOTNA | AK |
| FIREWEED LODGE AT LAKE CREEK LLC | WERNER | FRAUENFELDER | ANCHORAGE | AK |
| FISHTALE RIVER GUIDES | ANDREW | COUCH | PALMER | AK |
| FREELANCE OUTDOOR ADVENTURES | LANCE | KRONBERGER | EAGLE RIVER | AK |
| FRITZ GUIDING SERVICE | RYAN | FRITZ | SOLDOTNA | AK |
| GREAT LAND ADVENTURES LLC | RICHARD | BOWEN | BURIEN | WA |
| GREGS EZ LIMIT GUIDE SERVICE | GREG | BRUSH | SOLDOTNA | AK |
| HALL'S GUIDE SERVICE | KYLE | HALL | SOLDOTNA | AK |
| HIGH ADVENTURE AIR CHARTER GUIDES & OUTFITTERS | GREGORY | BELL | SOLDOTNA | AK |
| IFISHALASKA GUIDE SERVICE | PATRICK | DONELSON | WASILLA | AK |
| IGIUGIG LODGE LLC | BRADLEY | WAITMAN | WASILLA | AK |
| JASON LEE GUIDE SERVICES | JASON | LEE | SOLDOTNA | AK |
| KATMAI AIR LLC | RAYMOND | PETERSEN | ANCHORAGE | AK |
| KENNYS ALASKAN FISHING EXPERIENCE | KENNETH | WINGARD | SOLDOTNA | AK |
| LAKE CREEK FISHING LODGE | BRUNO | KREBS | ANCHORAGE | AK |
| LIFE ON THE LINE ALASKAN FLY FISHING | ARD | STETTS | WASILLA | AK |
| LIPSERVICE FISHING CHARTERS | CHAD | LIPSE | WASILLA | AK |
| LITTLE RIVER ANGLERS | WALTER | ZALESKI | ANCHORAGE | AK |
| MATANUSKA TROUT FISHERS | JHAN | HADDELAND | BIG LAKE | AK |
| MCDUGALL LODGE | RONALD | JEWETT | HIGHLAND | UT |
| MEMORIES LODGE | LARRY | BEYER | SKWENTNA | AK |
| MILLERS RIVERBOAT SERVICE | BENJAMIN | ALLEN | WASILLA | AK |
| MOOSEHORN LODGE | ERICH | NAPFLIN | WASILLA | AK |
| MYRACLE GUIDING SERVICE | EVAN | WERNER | NIKISKI | AK |

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| Business name | Proprietor | | City | State |
|---|-------------|-----------|----------------|-------|
| | First name | Last name | | |
| NEWHALEN LODGE | BILL | SIMS | ANCHORAGE | AK |
| NEWTONS FISHING EXPEDITIONS | JACOB | NEWTON | KENAI | AK |
| NORTHWOODS SERVICES INC DBA NORTHWOODS LODGE | ERIC | JOHNSON | SKWENTNA | AK |
| OUZEL EXPEDITIONS INC | PAUL | ALLRED | GIRDWOOD | AK |
| PERATAS GUIDED ADVENTURE | NICK | PERATAS | NIKISKI | AK |
| PHANTOM SALMON CHARTERS - TRI RIVERS | RHETT | NEALIS | TRAPPER CREEK | AK |
| QUAGLIANAS GUIDE SERVICE | MARK | QUAGLIANA | SOLDOTNA | AK |
| RAINBOW KING LODGE INC | RODGER | GLASPEY | ILIAMNA | AK |
| REDOUBT BAY LODGE | DANNY | BREWER JR | NIKISKI | AK |
| REDOUBT MOUNTAIN LODGE | WAYNE | HOLM | NORTH PLAINS | OR |
| RIFFLES AND WAVES ALASKA FISHING ADVENTURES LLC | ROBERT | GILL | DEARBORN | MI |
| ROB FREEMANS OUTDOOR ADVENTURES | ROBERT | FREEMAN | FORT SCOTT | KS |
| RUN WILD ALASKA INC DBA ALASKA RIVERS ADVENTURE | GEORGE | HEIM | COOPER LANDING | AK |
| RUSSELL FISHING COMPANY, INC | DUSTIN | RUSSELL | BROOKINGS | OR |
| SILVER SALMON CREEK INC | DAVID | CORAY | SOLDOTNA | AK |
| SUSITNA ADVENTURE CHARTERS | STEVEN | SCHAFFER | WILLOW | AK |
| TALAHEIM LODGE AND AIR SERVICE | MARK | MILLER | ANCHORAGE | AK |
| TALKEETNA DENALI VIEW LODGE, LLC | THOMAS | REDMAN | TALKEETNA | AK |
| TALKEETNA FISHING GUIDES | GERALD | SOUSA | TALKEETNA | AK |
| TALSTAR LLC | MARK | COOLEY | PARMA | MI |
| TALVIEW RESORTS LLC | CHRISTOPHER | POYNTER | SKWENTNA | AK |
| TIM CRIST ALASKAN ADVENTURES INC | TIM | CRIST | TWIN FALLS | ID |
| TONYS GUIDE SERVICE | ANTHONY | MANN | VALDEZ | AK |
| TOWER ROCK LODGE | MICHAEL | TUHY | SOLDOTNA | AK |
| TRAPPER TIM LLC | TIM | BUECHLE | TALKEETNA | AK |
| TURNERS GUIDE SERVICE | RALPH | TURNER | SUTTER | CA |
| VALLEY RIVER CHARTERS | MATTHEW | PETERSON | ANCHORAGE | AK |
| WESTERN GUIDE SERVICE | RODNEY | SMALL | KENAI | AK |
| WILDERNESS PLACE LODGE | JASON | ROCKVAM | ANCHORAGE | AK |
| WOMENS FLYFISHING | CECILIA | KLEINKAUF | ANCHORAGE | AK |
| XTREME XPEDITIONS | ANDREW | WILLIS | WASILLA | AK |
| YENTNA RIVER SERVICES | ROGER | PHILLIPS | SKWENTNA | AK |
| YENTNA STATION ROADHOUSE | DANIEL | GABRYSZAK | WASILLA | AK |

**APPENDIX F: UPPER COOK INLET COMMERCIAL
SALMON FISHERY**



Appendix F1.—Upper Cook Inlet commercial salmon fishing districts.

Appendix F2.—Upper Cook Inlet commercial salmon harvest by species, 1954–2013.

| Year | Salmon species | | | | | Total |
|------|----------------|-----------|---------|-----------|-----------|------------|
| | Chinook | Sockeye | Coho | Pink | Chum | |
| 1954 | 63,780 | 1,207,046 | 321,525 | 2,189,207 | 510,068 | 4,291,626 |
| 1955 | 45,926 | 1,027,528 | 170,777 | 101,680 | 248,343 | 1,594,254 |
| 1956 | 64,977 | 1,258,789 | 198,189 | 1,595,375 | 782,051 | 3,899,381 |
| 1957 | 42,158 | 643,712 | 125,434 | 21,228 | 1,001,470 | 1,834,002 |
| 1958 | 22,727 | 477,392 | 239,765 | 1,648,548 | 471,697 | 2,860,129 |
| 1959 | 32,651 | 612,676 | 106,312 | 12,527 | 300,319 | 1,064,485 |
| 1960 | 27,512 | 923,314 | 311,461 | 1,411,605 | 659,997 | 3,333,889 |
| 1961 | 19,737 | 1,162,303 | 117,778 | 34,017 | 349,628 | 1,683,463 |
| 1962 | 20,210 | 1,147,573 | 350,324 | 2,711,689 | 970,582 | 5,200,378 |
| 1963 | 17,536 | 942,980 | 197,140 | 30,436 | 387,027 | 1,575,119 |
| 1964 | 4,531 | 970,055 | 452,654 | 3,231,961 | 1,079,084 | 5,738,285 |
| 1965 | 9,741 | 1,412,350 | 153,619 | 23,963 | 316,444 | 1,916,117 |
| 1966 | 8,544 | 1,852,114 | 289,837 | 2,005,745 | 532,756 | 4,688,996 |
| 1967 | 7,859 | 1,380,062 | 177,729 | 32,229 | 296,837 | 1,894,716 |
| 1968 | 4,536 | 1,104,896 | 468,160 | 2,276,993 | 1,107,903 | 4,962,488 |
| 1969 | 12,386 | 691,815 | 100,684 | 32,499 | 267,686 | 1,105,070 |
| 1970 | 8,336 | 732,572 | 275,205 | 814,760 | 750,774 | 2,581,647 |
| 1971 | 19,765 | 636,289 | 100,362 | 35,590 | 323,945 | 1,115,951 |
| 1972 | 16,086 | 879,811 | 80,896 | 628,566 | 626,414 | 2,231,773 |
| 1973 | 5,194 | 670,098 | 104,420 | 326,184 | 667,573 | 1,773,469 |
| 1974 | 6,596 | 497,185 | 200,125 | 483,730 | 396,840 | 1,584,476 |
| 1975 | 4,787 | 684,751 | 227,376 | 336,330 | 951,588 | 2,204,832 |
| 1976 | 10,865 | 1,664,149 | 208,663 | 1,256,728 | 469,180 | 3,609,585 |
| 1977 | 14,790 | 2,052,291 | 192,593 | 553,855 | 1,233,436 | 4,046,965 |
| 1978 | 17,299 | 2,621,421 | 219,193 | 1,688,442 | 571,779 | 5,118,134 |
| 1979 | 13,738 | 924,406 | 265,164 | 72,980 | 649,758 | 1,926,046 |
| 1980 | 13,798 | 1,573,588 | 271,416 | 1,786,421 | 387,815 | 4,033,038 |
| 1981 | 12,240 | 1,439,262 | 484,405 | 127,143 | 831,977 | 2,895,027 |
| 1982 | 20,870 | 3,259,864 | 792,224 | 790,644 | 1,432,940 | 6,296,542 |
| 1983 | 20,634 | 5,049,733 | 516,322 | 70,327 | 1,114,858 | 6,771,874 |
| 1984 | 10,062 | 2,106,714 | 449,993 | 617,452 | 680,726 | 3,864,947 |
| 1985 | 24,088 | 4,060,429 | 667,213 | 87,828 | 772,849 | 5,612,407 |
| 1986 | 39,242 | 4,788,492 | 756,864 | 1,299,379 | 1,134,173 | 8,018,150 |
| 1987 | 39,661 | 9,500,186 | 451,133 | 109,801 | 348,926 | 10,449,707 |
| 1988 | 29,060 | 6,834,342 | 559,922 | 469,968 | 708,573 | 8,601,865 |
| 1989 | 26,742 | 5,010,698 | 339,201 | 67,430 | 122,027 | 5,566,098 |
| 1990 | 16,105 | 3,604,259 | 501,643 | 603,434 | 351,123 | 5,076,564 |
| 1991 | 13,542 | 2,178,331 | 426,487 | 14,663 | 280,223 | 2,913,246 |
| 1992 | 17,171 | 9,108,353 | 468,930 | 695,861 | 274,303 | 10,564,618 |
| 1993 | 18,749 | 4,755,012 | 306,858 | 100,918 | 122,767 | 5,304,304 |
| 1994 | 19,937 | 3,543,047 | 579,954 | 518,747 | 299,323 | 4,961,008 |
| 1995 | 17,860 | 2,960,646 | 450,787 | 133,850 | 531,215 | 4,094,358 |

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| Year | Salmon species | | | | | Total |
|-----------|----------------|-----------|---------|---------|---------|-----------|
| | Chinook | Sockeye | Coho | Pink | Chum | |
| 1996 | 14,248 | 3,888,778 | 321,411 | 242,911 | 156,457 | 4,623,805 |
| 1997 | 13,235 | 4,176,696 | 152,404 | 70,928 | 103,036 | 4,516,299 |
| 1998 | 7,997 | 1,218,956 | 160,644 | 551,345 | 95,654 | 2,034,596 |
| 1999 | 14,128 | 2,680,707 | 125,343 | 16,129 | 174,243 | 3,010,550 |
| 2000 | 7,229 | 1,322,180 | 236,128 | 146,156 | 126,927 | 1,838,620 |
| 2001 | 9,295 | 1,826,833 | 113,311 | 72,559 | 84,494 | 2,106,492 |
| 2002 | 12,069 | 2,761,886 | 244,014 | 436,380 | 225,446 | 3,679,795 |
| 2003 | 18,258 | 3,524,411 | 102,237 | 51,693 | 121,430 | 3,818,029 |
| 2004 | 27,476 | 4,926,220 | 311,056 | 357,939 | 146,164 | 5,768,855 |
| 2005 | 28,171 | 5,238,168 | 224,657 | 48,419 | 69,740 | 5,609,155 |
| 2006 | 16,917 | 2,191,618 | 174,507 | 404,094 | 63,893 | 2,851,029 |
| 2007 | 17,625 | 3,316,779 | 177,339 | 147,020 | 77,240 | 3,736,003 |
| 2008 | 13,333 | 2,380,135 | 171,869 | 169,368 | 50,315 | 2,785,020 |
| 2009 | 8,750 | 2,045,794 | 153,210 | 214,321 | 82,811 | 2,504,886 |
| 2010 | 9,901 | 2,828,367 | 207,256 | 292,672 | 228,670 | 3,566,866 |
| 2011 | 11,248 | 5,277,440 | 95,276 | 34,030 | 129,202 | 5,547,196 |
| 2012 | 2,526 | 3,133,801 | 106,772 | 469,411 | 269,585 | 3,982,095 |
| 2013 | 5,398 | 2,683,224 | 260,963 | 48,275 | 139,365 | 3,137,225 |
| Average | | | | | | |
| 1954–2013 | 18,331 | 2,556,209 | 283,619 | 580,406 | 461,028 | 3,899,592 |
| 1983–2013 | 17,118 | 3,836,201 | 316,571 | 276,236 | 293,089 | 4,739,215 |
| 2004–2013 | 14,135 | 3,402,155 | 174,650 | 203,068 | 123,425 | 3,746,608 |

Source: 1954–1965 from Fox and Shields (2004); 1966–2013 from Shields and Dupuis (2013).

APPENDIX G: ACCESS PROJECTS

Boating Projects

- 1) Signage identifying public access on an as-needed basis. Also providing small road, trail, and site maintenance on an as-needed basis.
- 2) Susitna Landing Facility Operations: in March of 2013, the contract was renewed with JB Bear Cache Inc. (Jeff Boatright), the present concessionaire to operate and maintain Susitna Landing Boat Launch Facility. To date, Mr. Boatright has been doing an exceptional job operating and maintaining the ADF&G Boat Launch and Camping Facility.
- 3) Susitna Landing Operation Maintenance and Small Development Project (~\$65K FY14 Funding Authority): this project will provide funding necessary to continue operations, maintenance, and management of the ADF&G-owned Susitna Landing Boat Launch Facility.
- 4) Rocky Lake SRS Boat Launch Renovation Project (\$170K FY10 Funding Authority): this is a Cooperative project with Alaska Department of Natural Resources (DNR), Division of Parks and Outdoor Recreation (DPOR) to upgrade and repair the existing gravel launch and parking lot. This project would include renovating the launch with installation of concrete planks and expansion of the parking area. Presently, the survey is complete, site and design plans are complete, and permitting is complete, and construction for the project is presently scheduled for summer and fall 2015.
- 5) Big Lake South SRS Boat Launch and Boat Mooring Dock Renovation Project (\$135K FY11 Funding Authority): the cooperative project with DNR DPOR, to replace the old, deteriorating “hook-and-eye” concrete ramp planks, was completed in summer 2013. Presently, for the boat mooring dock replacement portion of the project, the site has been surveyed and the dock designed; the construction is scheduled for spring and summer 2015.
- 6) Big Lake North SRS Boat Launch Renovation Project (\$100K FY12 Funding Authority): the cooperative project with DNR DPOR, to replace the old, deteriorating “hook-and-eye” concrete ramp planks, was completed in summer 2013. Presently, for the boat mooring dock replacement portion of the project, the site has been surveyed and the dock designed; the construction is scheduled for spring and summer 2015.
- 7) Homer Boat Launch Facility and Floating Dock Renovation Project (\$350K FY12, \$140K FY13, and \$1.43M FY14 Funding Authority): this is a continuing, multi-year funded cooperative project with the City of Homer and ADF&G for renovation of the public boat launch ramp facility in Homer Harbor. The cooperative agreement for Phase I activities (design and permitting) has been finalized. Construction is currently scheduled for winter and spring 2015.

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Boating and Nonboating Projects

- 1) Stocked and Wild Lake Access Site Evaluation Project: preliminary assessment of Southcentral (81 stocked lakes) and Kenai Peninsula (38 stocked lakes) areas stocked lake sites was initiated in summer 2010 and has continued through 2013. The ultimate goal is to list access site amenities, launch and trail types, and legal access documentation signifying each easement classification. All aforementioned information is planned to be listed on the ADF&G SF Access web site.

Annual Small Access Maintenance

- 1) Little Susitna Public Use Facility (LSPUF) Operations and Maintenance Contract (~\$104.3K FY11; ~\$105.4K FY12; ~\$157K FY13; ~\$193,681 FY14): provides funds via Reimbursable Services Agreement out of Headquarters Access Maintenance Budget to DPOR to operate and manage the facility.
- 2) Grounds Cleaning and Refuse Service (~\$21.565K FY14): provides service for Sheep and Caswell creeks, Bonnie Lake, and Eklutna Tailrace.
- 3) Toilet Service, Portable and Vault Service (~\$13.91K FY14): provides service for Caswell (\$2.1K) and Sheep creeks (\$360), Eklutna tailrace (~\$10.17K), Talkeetna River (\$380), Su Landing (\$360), and Bonnie Lake (\$540).
- 4) Installation of public access stocked lake signage: an ADF&G Technician posts and maintains signs. Many signs were repaired and posted throughout 2013, including signage at Little Susitna Public Use Facility, Susitna and Talkeetna Landing, Arc, Barbara, Caswell, Island, Lorraine, and Visnaw lakes, which helped direct the public and mitigate landowner trespass concerns.
- 5) Land Disputes: land access research was conducted on numerous angler access sites and public lake easements including Bruce, Crooked, Flat, Long (Willow), and Lynn lakes.

Appendix G2.–Completed access projects for Northern Cook Inlet Management Area, 2013.

| Project type | Location(s) | Project details | Cost | Completion |
|--------------|--|---|--------------|-------------------------------|
| Nonboating | Existing SF angler access sites | Maintenance: toilets, waste and refuse removal, cleaning services, road grading and repairs, signage, and miscellaneous repairs. | \$54,000.00 | Seasonal 2013 (May–September) |
| | Eklutna Tailrace | Road grading and repairs (gravel) project at Eklutna Tailrace day-use access site. | \$2,000.00 | Fall 2013 |
| | Legal access at multiple sites | Complete access research and resolve issues at multiple sites including infield work investigating and defining legal access easements (e.g., historical trails verses granted or dedicated access, etc.) | \$0.00 | 2013 |
| | Eklutna, Sheep, and Caswell creeks | Provide funds via RSA to AWT position to provide patrols of the facility for public safety. | \$10,000.00 | Seasonal (May–September) |
| Total | | | \$66,000.00 | |
| Boating | Existing SF boating access sites. | Maintenance: toilets, waste removal, cleaning services, dredging, road grading and repairs, signage, and miscellaneous repairs. | \$5,000.00 | Seasonal 2013 (May–September) |
| | CIP Big Lake North and South Boat Launch | Big Lake North and South SRS Boat Launch and Boat Mooring Dock Renovation Project. The cooperative project with DNR DPOR to replace the old, deteriorating “hook & eye” concrete ramp planks. | \$235,000.00 | Summer 2013 |

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Appendix G2.–Page 2 of 2.

| Project type | Location(s) | Project details | Cost | Completion |
|---------------------|-----------------------|--|---------------------|---------------|
| Boating (continued) | Talkeetna | Maintenance dredge of boat launch area to provide sufficient water for operation and safe boat navigation. | \$2,400.00 | May 2013 |
| | LSPUF | Funded DPOR for 2013 maintenance and operations. | \$193,681.00 | Seasonal 2013 |
| | CIP Susitna Landing | This small development project will provide funding necessary to continue operations, maintenance, and management of the ADF&G-owned facility. | \$65,000.00 | Seasonal 2013 |
| | CIP Homer Boat Launch | Homer Boat Launch Facility and Floating Dock Renovation Project is a continuing, multi-year funded cooperative project with the City of Homer and ADF&G for renovation of the public boat launch ramp facility in Homer Harbor. Design and permitting have been completed. | \$140,000.00 | July 2013 |
| Total | | | \$641,081.00 | |

Note: AWT = Alaska Wildlife Troopers; CIP = Capital Improvement Project; DNR DPOR = Department of Natural Resources Division of Parks and Outdoor Recreation; LSPUF = Little Susitna Public Use Facility; RSA = reimbursable service agreement; SF = Division of Sport Fish; SRS = State Recreation Site.

Appendix G3.–Proposed access projects for Northern Cook Inlet Management Area in 2013.

| Project type | Location (s) | Project details ^a | Estimated cost | Funding year |
|--------------|-------------------------------|--|----------------|-----------------------------|
| Nonboating | Region II small access | Site maintenance contracts, signage, road grading & repair, and miscellaneous repair. | \$50,000.00 | SAM yearly |
| | Eklutna Tailrace | Install double vault latrine to meet the increased demand to the newly designed and upgraded facility. | \$60,000.00 | Regional funding commitment |
| | Sheep Creek | Stairwell Renovation and Vault Latrine Replacement: a cooperative project with DPOR with ADF&G for the removal/replacement of existing vault latrines and renovation of trail. | \$253,500.00 | Regional funding commitment |
| | Wolverine Lake access parcels | Anchorage Legal Access Shop and DNR MLW need to resolve dispute on RS2477 legal access trail with discontented property owners (Moore's). To proceed possibly need Attorney General's office involvement to step up process and spell-out legal determination in a registered letter to the Moore's. Once legal access is reconciled present proposal to purchase approximately a 10' x 60' access corridor/easement through MHTLO property from one of two lakefront parcels (~6.25 acres) to insure continued public access to lake. This portion of the project is contingent upon securing/finalizing legal access to the lots by way of the RS2477 easement. Cost - approximate estimate \$25K total for survey and corridor/easement purchase. | \$80,000.00 | Regional funding commitment |
| Total | | | \$425,500.00 | |

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| Project type | Location (s) | Project details ^a | Estimated cost | Funding year |
|--------------|--|---|---------------------------|----------------------|
| Boating | Region II small access | Road and site maintenance and annual dredge work. | \$2,000.00 | SAM |
| | Little Susitna River Public Use Facility | RSA to fund DNR DPOR for LSPUF operation. | \$194,400.00 ^c | SAM FY15 |
| | Homer Harbor Launch Facility and Floating Dock | Multi-year funded cooperative project with the City of Homer and ADF&G for the renovation/improvement project at existing boat launch facility. Project includes replacing existing launch planks and mooring floats. | \$3,670,000.00 | CIP FY10,11,12,13 |
| | Stocked and wild lakes | Conduct access site surveys. | \$5,000 | SAM |
| | Susitna Landing | This small development project is to provide for continued high quality facility maintenance and operations of the Susitna Landing Boat Launch Facility by utilizing a private concessionaire (Jeff Boatright) salaried from this grant to staff and manage the facility. The project would also provide for construction of small development projects to provide a safer and secure facility. | \$65,000.00 | CIP FY14 |
| Total | | | \$3,936,000.00 | |

^a Completed access projects are listed in Appendix G2.

^b CIP = capital improvement project; DNR = Division of Natural Resources; MLW = Division of Mining, Land, and Water; DPOR = Division of Parks and Outdoor Recreation; FY = fiscal year; SF = Division of Sport Fish; LSPUF = Little Susitna Public Use Facility; MHTLO = State of Alaska Mental Health Trust Land Office; MSB = Matanuska-Susitna Borough; RSA = reimbursable service agreement; SAM = small access maintenance; SRA = State Recreation Area (managed by DPOR).

^c Reimbursable service agreement (RSA) amount fluctuates year-to-year depending on revenue receipt income received.

Appendix G4.–Northern Cook Inlet Management Area stocked lakes access summary.

| Lake | Access route | Easement classification ^a | Parking area | Trail condition | % Public shoreline | Comments |
|--------------|--------------|--------------------------------------|--------------------------------------|--------------------------------|--------------------|---|
| Barley | good | PUE DNR | 5 vehicle gravel | Cleared section line | 1.00% | 100 yd. walk in |
| Bearpaw | good | PUA | 5 vehicle gravel | Gravel road to lake | 50% | Designated public park MSB plat maps |
| Benka | good | PUA | 2 vehicle gravel | Access rd. ends at lake | 0.50% | No camping – home owner lease |
| Beverly | good | S/L (33 ft) | 5 vehicle gravel | Swampy; ATV or foot access | 15% | 33' access at “Y” in trail to Kalmbach Lake; state land |
| Big | good | SRS | 20 vehicle gravel | Concrete boat launches | 2% | 2 State Rec. Sites; camping |
| Big Beaver | good | Rd. ROW | 5 vehicles gravel | MSB gravel road and launch | 1% | MSB Road ROW |
| Big No Luck | canoe trail | SRA DNR | 15 vehicle gravel | Canoe trail: 1.5 miles | 100% | Nancy Lake SRA; camping |
| Bruce | good | PUE (60 ft) MSB | 5 vehicle gravel limited to road ROW | Cleared easement | 1% | Shoreline muskeg; improve parking |
| Canoe | good | SRA DNR | 6 vehicle gravel | Packed gravel | 21% | Dock, picnic tables, outhouse; K/B Rec. |
| Carpenter | good | PUE (150 ft) MSB | 3 vehicle, dirt | Gravel access rd. ends at lake | 0.70% | Gravel boat launch; no camping |
| Christiansen | good | PUE MSB Park | 6 vehicle gravel | Access rd. ends at lake | 0.40% | Gravel boat launch; no camping |
| Coyote | good | PUE (50 ft) MSB | 2 vehicle gravel | Good | 100% | Borough blocked rd. access to park, very poor shape |
| Crystal | good | PUE (60 ft) MSB | 10 vehicle gravel | Access rd. ends at lake | 0.40% | Vehicle access blocked; walk in and no camping |
| Dawn | good | PUE MSB Park | 8 vehicle gravel | Needs boardwalk | 5% | Designated public park: Tract C |
| Diamond | good | PUE (50 ft) | 6 vehicle gravel | Foot trail | 36% | ADL #225903 – 100 yd. walk in |
| Echo | good | Rd. ROW 100 ft Glenn Hwy | 4 vehicle paved pull-out | Signed, gravel | 15% | Shoreline trees, brush; private access |
| Farmer | good | 50 ft Sec/Line | 5 vehicle gravel | Good | 1% | Shoreline muskeg |

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| Lake | Access route | Easement classification ^a | Parking area | Trail condition | % Public shoreline | Comments |
|----------------|--------------|--------------------------------------|-------------------------|-----------------------------|--------------------|--|
| Finger | good | SRA | 30 vehicle gravel | Access rd. ends at lake | 5% | State Rec. Site, camping & fishing platforms ADA accessible |
| Florence | good | S/L (66 ft) MSB | 2 vehicle pull- out ROW | Good | 0.80% | No camping |
| Homestead | needs signs | ROW Ease. 50 ft MSB dedicated access | Limited to access rd. | Access rd. ends at lake | 1% | Shoreline swampy; no camping |
| Honeybee | needs signs | PUA MSB | Limited to access rd. | Needs work, swampy | 6% | Adj. state land |
| Ida | need signs | PUE (20 ft) | 4 vehicle gravel | Steep, gravel | 0.10% | No camping |
| Irene | good | SRA | 4 vehicle gravel | gravel | 15% | K/B Rec. Area |
| Kalmbach | good | S/L (33 ft) MSB | 5 vehicle gravel | Swampy, ATV, or foot access | 20% | Sec/line ease. to trail on state land |
| Kashwitna | good | Rd. ROW | 30 vehicle paved | Access is by lake | 10% | Shoreline muskeg along ROW |
| Kepler/Bradley | good | SRA | 30 vehicle gravel | Marked, gravel | 89.50% | Public use access easement for launch and parking, private camping |
| Klaire | good | SRA | 30 vehicle gravel | 0.4 mile; needs sign | 100% | Brushy shoreline; K/B Rec. Area |
| Knik | good | PUA | 2 vehicle | Access rd. ends at lake | 0.60% | No camping |
| Lalen | good | PUE (20 ft) MSB | 2 vehicle gravel | Access rd. ends at lake | 0.20% | Gravel boat launch; no camping |
| Long (Mile 86) | good | SRA | 15 vehicle gravel | Access rd. ends at lake | 90% | Vacant/abandoned - state rec. site; camping/no amenities |
| Long (K/B) | good | SRA | 7 vehicle gravel | Packed dirt, steep | 100% | Hook-&-release only; K/B Rec. Area |
| Little Lonely | good | 60' PUE to S/L MSB | Limited to road ROW | Short, dirt road | 0.50% | Access rd. can be 4WD; no camping |
| Lorraine | good | MSB property | 6 vehicle gravel | Muddy, rutted by | 95% | Surrounded by borough land |
| Loon | good | S/L (50 ft) | 5 vehicle gravel | Access area gravel | 0.40% | No camping |

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Appendix G4.–Page 3 of 4.

| Lake | Access route | Easement classification ^a | Parking area | Trail condition | % Public shoreline | Comments |
|------------------------|---------------|--------------------------------------|-------------------------------|---|--------------------|---|
| Lucille | good | PUE City of Wasilla | 3 vehicle gravel | Access rd. ends at lake | 4% | 2 access sites; camping and parking at Lucille Park |
| Lynne | good | PUA | 2 vehicle dirt | Access rd. ends at lake | 2% | Access rd.; 2% is state land |
| Marion | good | PUA | 4 vehicle gravel | Steep dirt, some erosion | 12% | Adj. to MSB land |
| Matanuska | good | SRA | 30 vehicle gravel | Short gravel | 35% | Docks, picnicking outhouse; K/B Rec Area |
| Meirs (McLeod) | good | PUE | 8 vehicle, can be muddy | Steep, dirt | 1% | No camping |
| Memory | good | S/L (33 ft) MSB | 4 vehicle, gravel | Access rd. ends at lake | 0.30% | No camping |
| Mile 180 | good | Rd. ROW | 10 vehicle, paved pullouts | Pullouts beside lake | 40% | Lakeshore muskeg |
| Morvro | fair | S/L (33 ft) MSB | limited to rd. ROW | Swampy, foot trail | 0.30% | Needs work with trail and parking |
| North Friend (Montana) | good | Rd. ROW MSB | 10 vehicle gravel cross Parks | Short trail to outlet | 0.50% | Access ROW |
| Prator | good | PUA | 4 vehicle gravel | Access rd. ends at lake | 2.00% | Castle Public Park; no camping |
| Ravine | fair | PUA DNR | 4 vehicle gravel | Steep, worn | 50.00% | Adj. state land |
| Reed | good | PUE (10 ft) MSB | Limited to rd. ROW | Repairs made to drop-off, need timber steps | 0.20% | Improve parking; no camping |
| Rocky | good | SRS | 30 vehicle gravel | Access rd. ends at lake | 5.00% | State Rec. Site; camping |
| Ruby | ATV, no signs | Trail Easement (50 ft) | 15 vehicle gravel | 5 mile ATV trail | 40.00% | New surveyed trail, adj. state land |
| Seventeen mile | good | PUA | 8 vehicle gravel | Access rd. ends at lake | 0.60% | No camping |
| Seymour | good | S/L (83 ft) MSB | 4 vehicle gravel | Access rd. ends at lake | 0.50% | MSB land adjacent |
| Slipper (Eska) | good | Rd. ROW MSB | 20 vehicle gravel | Access rd. ends at lake | 75.00% | Last 1/4 mile rough |

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Appendix G4.–Page 4 of 4.

| Lake | Access route | Easement classification ^a | Parking area | Trail condition | % Public shoreline | Comments |
|------------------------|--------------|--------------------------------------|----------------------------------|-------------------------|--------------------|--------------------------------------|
| South Friend (Montana) | good | Rd. ROW MSB | 10 vehicle gravel | Short, dirt | 10.00% | Shoreline swampy along ROW |
| South Rolly | good | SRS DNR | 20 vehicle gravel | Access rd. ends at lake | 100.00% | State Rec. Site; camping |
| Tigger | good | PUE | 5 vehicle gravel | Foot trail, needs sign | 100.00% | New access acquired from MSB |
| Twin Island | fair | State prop. | 4 vehicle gravel | Swampy | 0.60% | MSB prop conflict/mental health land |
| Vera | good | S/L (50 ft) MSB | 6 vehicle dirt | Soft tundra | 0.30% | No camping |
| Victor | good | SRA | 30 vehicle gravel | Dirt, some mud | 100% | Brushy shoreline; K/B Rec. Area |
| Visnaw | good | S/L (33 ft) MSB | 3 vehicle gravel | Access rd. ends lake | 0.40% | No camping |
| Walby | good | PUA MSB | 6 vehicle gravel | Access rd. ends lake | 1% | No camping |
| Wiener | good | Rd. ROW | (2) 4 vehicle pullouts | Pullouts beside lake | 25% | Access along Glenn Hwy. |
| West Sunshine | good | PUE (20 ft) MSB | 2 vehicle gravel limited rd. ROW | Steep, dirt | 0.40% | No camping |
| Willow | good | S/L (50 ft) MSB | 30 vehicle gravel | Access rd. ends lake | 0.40% | Access by Willow Comm. Center |
| Wishbone | fair | State prop. | 4 vehicle dirt | Rough 4WD only | 100% | Hook-&-release only, state land |
| Wolf | good | SRA | 10 vehicle gravel | Short dirt | 33% | Vacant/abandoned SRA; no camping |
| “X” | good | PUA MSB | 6 vehicle gravel | Access trail to lake | 100% | Hook-&-release only; state land |
| “Y” | good | Rd. ROW | 2 vehicle dirt | Short, steep | 100% | Brushy, state land |

^a DNR = Department of Natural Resources; MSB = Matanuska-Susitna Borough; PUA = dedicated (or reserved) public use area (parcel platted for public recreation); PUE = dedicated public use easement (feet wide); ROW = right of way; S/L = section line easement (feet wide); SRA = state recreation area (parcel managed by State Parks).

**APPENDIX H: INFORMATION AND EDUCATION
PROGRAM**

Appendix H1.—Classroom visits and presentations conducted for ADF&G Information and Education Program, 2011–2013.

| Year | Date | School | Students | Age group | Subject |
|------|--------|--------------------------------|----------|-------------|----------------------------------|
| 2011 | 3 Oct | Swanson | 50 | Elementary | Salmon Dissection |
| 2011 | 3 Oct | Larson | 60 | Elementary | Life Cycle Presentation |
| 2011 | 4 Oct | Palmer | 19 | High School | Salmon Dissection |
| 2011 | 4 Oct | Cottonwood Creek | 56 | Elementary | Salmon Dissection |
| 2011 | 5 Oct | Butte | 50 | Elementary | Salmon Dissection |
| 2011 | 6 Oct | Louise Farm School | 9 | Elementary | Watershed Presentation |
| 2011 | 6 Oct | Machetanz | 55 | Elementary | Life Cycle Presentation |
| 2011 | 7 Oct | Larson | 60 | Elementary | Salmon Dissection |
| 2011 | 7 Oct | Talkeetna | 35 | Elementary | Salmon Dissection |
| 2011 | 10 Oct | Pioneer Peak | 50 | Elementary | Life Cycle Presentation |
| 2011 | 10 Oct | Beryozova | 20 | Elementary | Life Cycle Presentation |
| 2011 | 11 Oct | Pioneer Peak | 50 | Elementary | Salmon Dissection |
| 2011 | 12 Oct | Big Lake | 134 | Elementary | Salmon Dissection |
| 2011 | 13 Oct | Snowshoe | 62 | Elementary | Salmon Dissection |
| 2011 | 13 Oct | Swanson | 50 | Elementary | Life Cycle Presentation |
| 2011 | 14 Oct | Shaw | 70 | Elementary | Salmon Dissection |
| 2011 | 14 Oct | Finger Lake | 42 | Elementary | Salmon Dissection |
| 2011 | 17 Oct | Sherrod | 180 | Elementary | Life Cycle Presentation |
| 2011 | 17 Oct | Swanson | 50 | Elementary | Watershed Presentation |
| 2011 | 18 Oct | Sherrod | 180 | Elementary | Salmon Dissection |
| 2011 | 19 Oct | Houston | 60 | High School | Salmon Dissection |
| 2011 | 21 Oct | Meadow Lakes | 65 | Elementary | Salmon Dissection |
| 2011 | 24 Oct | Office Day | | | Rod Loaner Program |
| 2011 | 26 Oct | Knik | 75 | Elementary | Watershed Presentation |
| 2011 | 27 Oct | Louise Farm School | 9 | Elementary | Salmon Dissection |
| 2011 | 27 Oct | Machetanz | 55 | Elementary | Salmon Dissection |
| 2011 | 28 Oct | Knik | 130 | Elementary | Salmon Dissection |
| 2011 | 28 Oct | Larson | 60 | Elementary | Watershed Presentation |
| 2011 | 10 May | Salmon Celebration all schools | 999 | Elementary | Salmon release at Matanuska Lake |
| 2011 | Total | | 2,735 | | |

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Appendix H1.–Page 2 of 3.

| Year | Date | School | Students | Age group | Subject |
|------|--------|--------------------------------|----------|-------------|----------------------------------|
| 2012 | 3 Oct | Swanson | 50 | Elementary | Life Cycle Presentation |
| 2012 | 3 Oct | Larson | 60 | Elementary | Life Cycle Presentation |
| 2012 | 4 Oct | Palmer | 19 | High School | Salmon Dissection |
| 2012 | 4 Oct | Cottonwood Creek | 56 | Elementary | Salmon Dissection |
| 2012 | 5 Oct | Butte | 50 | Elementary | Salmon Dissection |
| 2012 | 6 Oct | Louise Farm School | 9 | Elementary | Life Cycle Presentation |
| 2012 | 6 Oct | Machetanz | 55 | Elementary | Life Cycle Presentation |
| 2012 | 7 Oct | Talkeetna | 31 | Elementary | Salmon Dissection |
| 2012 | 10 Oct | Pioneer Peak | 52 | Elementary | Life Cycle Presentation |
| 2012 | 10 Oct | Beryozova | 20 | Elementary | Watershed Presentation |
| 2012 | 11 Oct | Pioneer Peak | 52 | Elementary | Salmon Dissection |
| 2012 | 12 Oct | Finger Lake | 32 | Elementary | Life Cycle Presentation |
| 2012 | 12 Oct | Big Lake | 128 | Elementary | Salmon Dissection |
| 2012 | 13 Oct | Snowshoe | 62 | Elementary | Salmon Dissection |
| 2012 | 13 Oct | Swanson | 50 | Elementary | Life Cycle Presentation |
| 2012 | 14 Oct | Shaw | 70 | Elementary | Salmon Dissection |
| 2012 | 14 Oct | Finger Lake | 42 | Elementary | Salmon Dissection |
| 2012 | 17 Oct | Sherrod | 180 | Elementary | Life Cycle Presentation |
| 2012 | 17 Oct | Swanson | 50 | Elementary | Life Cycle Presentation |
| 2012 | 19 Oct | Houston | 60 | High School | Salmon Dissection |
| 2012 | 19 Oct | Sherrod | 180 | Elementary | Salmon Dissection |
| 2012 | 21 Oct | Beryozova | 20 | Elementary | Salmon Dissection |
| 2012 | 21 Oct | Meadow Lakes | 65 | Elementary | Salmon Dissection |
| 2012 | 26 Oct | Knik | 130 | Elementary | Watershed Presentation |
| 2012 | 27 Oct | Louise Farm School | 9 | Elementary | Salmon Dissection |
| 2012 | 27 Oct | Machetanz | 55 | Elementary | Salmon Dissection |
| 2012 | 28 Oct | Knik | 130 | Elementary | Salmon Dissection |
| 2012 | 28 Oct | Larson | 60 | Elementary | Salmon Dissection |
| 2012 | 11 May | Salmon Celebration all schools | 939 | Elementary | Salmon release at Matanuska Lake |
| 2012 | Total | | 2,716 | | |

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Appendix H1.–Page 3 of 3.

| Year | Date | School | Students | Age group | Subject |
|------|--------|--------------------|----------|-------------|------------------------|
| 2013 | 4 Oct | Finger Lake | 44 | Elementary | Watershed Presentation |
| 2013 | 7 Oct | Snowshoe | 63 | Elementary | Watershed Presentation |
| 2013 | 9 Oct | Midnightsun | 46 | Elementary | Salmon Dissection |
| 2013 | 10 Oct | Cottonwood Creek | 85 | Elementary | Salmon Dissection |
| 2013 | 11 Oct | Snowshoe | 63 | Elementary | Salmon Dissection |
| 2013 | 11 Oct | Larson | 50 | Elementary | Salmon Dissection |
| 2013 | 14 Oct | Midnightsun | 105 | Elementary | Watershed Presentation |
| 2013 | 15 Oct | Sutton | 30 | Elementary | Salmon Dissection |
| 2013 | 15 Oct | Tanaina | 75 | Elementary | Salmon Dissection |
| 2013 | 16 Oct | Houston | 30 | Elementary | Salmon Dissection |
| 2013 | 16 Oct | Butte | 60 | Elementary | Salmon Dissection |
| 2013 | 17 Oct | Meadow Lakes | 66 | Elementary | Salmon Dissection |
| 2013 | 21 Oct | Pioneer Peak | 75 | Elementary | Watershed Presentation |
| 2013 | 21 Oct | Machentanz | 60 | Elementary | Watershed Presentation |
| 2013 | 22 Oct | Teeland | 120 | Elementary | Salmon Dissection |
| 2013 | 23 Oct | Pioneer Peak | 50 | Elementary | Salmon Dissection |
| 2013 | 23 Oct | Pioneer Peak | 25 | Elementary | Salmon Dissection |
| 2013 | 24 Oct | Louise Farm School | 11 | Elementary | Salmon Dissection |
| 2013 | 28 Oct | Machentanz | 25 | Elementary | Watershed Presentation |
| 2013 | 29 Oct | Shaw | 75 | Elementary | Salmon Dissection |
| 2013 | 30 Oct | Finger Lake | 44 | Elementary | Salmon Dissection |
| 2013 | 4 Nov | Butte | 60 | Elementary | Design-a-fish |
| 2013 | 5 Nov | Talkeetna | 22 | Elementary | Salmon Dissection |
| 2013 | 5 Nov | Houston | 30 | High School | Salmon Dissection |
| 2013 | 6 Nov | Palmer | 23 | High School | Salmon Dissection |
| 2013 | 6 Nov | Fronteras | 40 | Elementary | Salmon Dissection |
| 2013 | 7 Nov | Knik | 146 | Elementary | Salmon Dissection |
| 2013 | 8 Nov | Machentanz | 60 | Elementary | Salmon Dissection |
| 2013 | 12 Nov | Birchtree | 44 | Elementary | Watershed Presentation |
| 2013 | 13 Nov | Snowshoe | 63 | Elementary | Design-a-fish |
| 2013 | 13 Nov | Birchtree | 44 | Elementary | Salmon Dissection |
| 2013 | 15 Nov | Sherrod | 150 | Elementary | Salmon Dissection |
| 2013 | Total | | 1,884.00 | | |

APPENDIX I: DESHKA RIVER WEIR DATA, 2013

Appendix II.—Deshka River weir data, 2013.

| Date | Chinook salmon | | | | | Coho salmon | | | | Daily passage | | | | River water | | | Boat traffic thru weir |
|--------|----------------|--------|---------|-----|--------------------|-------------|-----|---------|--------------------|---------------|------|------|------|-------------|------------|--------------|------------------------|
| | Passage | | Sampled | | Harvest above weir | Passage | | Sampled | Harvest above weir | Red | Chum | Pink | Pike | Stage (ft) | Temp. (°C) | Clarity (cm) | |
| | Daily | Cum | n | Fem | | Daily | Cum | | | | | | | | | | |
| 9 Jun | 43 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.40 | 14.50 | good | 14 |
| 10 Jun | 382 | 425 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3.26 | 15.10 | excellent | 2 |
| 11 Jun | 141 | 566 | 13 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3.15 | 15.6 | excellent | 7 |
| 12 Jun | 89 | 655 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.05 | 15.9 | excellent | 7 |
| 13 Jun | 206 | 861 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.94 | 16.2 | excellent | 4 |
| 14 Jun | 98 | 959 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.86 | 16.0 | excellent | 14 |
| 15 Jun | 89 | 1,048 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.80 | 17.0 | excellent | 15 |
| 16 Jun | 155 | 1,203 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.80 | 18.0 | excellent | 10 |
| 17 Jun | 262 | 1,465 | 8 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.70 | 19.5 | excellent | 9 |
| 18 Jun | 174 | 1,639 | 9 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.60 | 20.0 | excellent | 9 |
| 19 Jun | 44 | 1,683 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.65 | 20.0 | excellent | 3 |
| 20 Jun | 110 | 1,793 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.50 | 18.0 | excellent | 9 |
| 21 Jun | 752 | 2,545 | 16 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.47 | 17.1 | excellent | 8 |
| 22 Jun | 1,810 | 4,355 | 24 | 12 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.43 | 16.0 | excellent | 9 |
| 23 Jun | 2,583 | 6,938 | 26 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2.39 | 17.1 | excellent | 9 |
| 24 Jun | 481 | 7,419 | 43 | 14 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.36 | 16.9 | excellent | 12 |
| 25 Jun | 3,055 | 10,474 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.34 | 19.0 | excellent | 5 |
| 26 Jun | 1,313 | 11,787 | 10 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.30 | 18.9 | excellent | 10 |
| 27 Jun | 1,072 | 12,859 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.25 | 19.0 | excellent | 10 |
| 28 Jun | 310 | 13,169 | 9 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.22 | 18.5 | excellent | 12 |
| 29 Jun | 295 | 13,464 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.20 | 17.0 | excellent | 29 |
| 30 Jun | 563 | 14,027 | 10 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.20 | 17.0 | excellent | 14 |
| 1 Jul | 1,158 | 15,185 | 10 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.24 | 14.0 | excellent | 7 |
| 2 Jul | 215 | 15,400 | 9 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.29 | 14.3 | excellent | 15 |
| 3 Jul | 474 | 15,874 | 30 | 16 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.32 | 14.3 | excellent | 17 |
| 4 Jul | 842 | 16,716 | 16 | 6 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 2.38 | 14.0 | excellent | 15 |
| 5 Jul | 557 | 17,273 | 10 | 5 | 13 | 0 | 0 | 0 | 0 | 2 | 0 | 16 | 0 | 2.51 | 13.0 | excellent | 22 |
| 6 Jul | 529 | 17,802 | 17 | 7 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 2.84 | 13.5 | fair | 31 |
| 7 Jul | 37 | 17,839 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 2.91 | 13.2 | fair | 12 |
| 8 Jul | 8 | 17,847 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.76 | 13.8 | fair | 14 |

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| Date | Chinook salmon | | | | | Coho salmon | | | | | River water | | | | Boat traffic thru weir | | |
|--------|----------------|--------|---------|-----|--------------------|-------------|-----|---------|--------------------|---------------|-------------|-------|------|------------|------------------------|------------|--------------|
| | Passage | | Sampled | | Harvest above weir | Passage | | Sampled | Harvest above weir | Daily passage | | | | Stage (ft) | | Temp. (°C) | Clarity (cm) |
| | Daily | Cum | n | Fem | | Daily | Cum | | | n | Red | Chum | Pink | | | | |
| 9 Jul | 63 | 17,910 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 2.77 | 14.1 | fair | 10 |
| 10 Jul | 17 | 17,927 | 0 | 0 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 8 | 0 | 2.66 | 15.0 | excellent | 10 |
| 11 Jul | 81 | 18,008 | 3 | 2 | 0 | 14 | 16 | 0 | 0 | 0 | 0 | 7 | 0 | 2.55 | 17.0 | excellent | 5 |
| 12 Jul | 46 | 18,054 | 0 | 0 | 3 | 3 | 19 | 0 | 0 | 0 | 0 | 10 | 0 | 2.49 | 17.8 | excellent | 12 |
| 13 Jul | 24 | 18,078 | 0 | 0 | 4 | 7 | 26 | 0 | 0 | 0 | 0 | 3 | 0 | 2.36 | 19.0 | excellent | 10 |
| 14 Jul | 5 | 18,083 | 0 | 0 | 0 | 1 | 27 | 0 | 0 | 0 | 0 | 9 | 0 | 2.30 | 17.5 | excellent | 5 |
| 15 Jul | 45 | 18,128 | 3 | 1 | 0 | 1 | 28 | 0 | 0 | 0 | 0 | 5 | 0 | 2.24 | 18.0 | excellent | 1 |
| 16 Jul | 16 | 18,144 | 0 | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 13 | 0 | 2.20 | 16.5 | excellent | 5 |
| 17 Jul | 11 | 18,155 | 0 | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 45 | 0 | 2.16 | 17.0 | excellent | 1 |
| 18 Jul | 43 | 18,198 | 0 | 0 | 0 | 8 | 36 | 0 | 0 | 0 | 0 | 553 | 0 | 2.12 | 17.0 | excellent | 4 |
| 19 Jul | 28 | 18,226 | 0 | 0 | 0 | 14 | 50 | 0 | 0 | 3 | 6 | 584 | 0 | 2.11 | 17.3 | excellent | 8 |
| 20 Jul | 9 | 18,235 | 0 | 0 | 0 | 10 | 60 | 0 | 0 | 0 | 0 | 266 | 0 | 2.07 | 17.7 | excellent | 1 |
| 21 Jul | 6 | 18,241 | 0 | 0 | 0 | 9 | 69 | 4 | 0 | 1 | 2 | 353 | 0 | 2.05 | 16.1 | excellent | 8 |
| 22 Jul | 8 | 18,249 | 0 | 0 | 0 | 26 | 95 | 9 | 0 | 2 | 1 | 1,842 | 0 | 2.03 | 16.8 | excellent | 5 |
| 23 Jul | 16 | 18,265 | 0 | 0 | 0 | 12 | 107 | 2 | 0 | 0 | 0 | 1,407 | 0 | 1.97 | 17.9 | excellent | 0 |
| 24 Jul | 9 | 18,274 | 0 | 0 | 0 | 6 | 113 | 0 | 0 | 0 | 1 | 964 | 0 | 1.95 | 18.8 | excellent | 0 |
| 25 Jul | 2 | 18,276 | 0 | 0 | 0 | 2 | 115 | 2 | 0 | 0 | 0 | 281 | 0 | 1.93 | 20.0 | excellent | 4 |
| 26 Jul | 5 | 18,281 | 0 | 0 | 0 | 10 | 125 | 4 | 2 | 0 | 0 | 1,537 | 1 | 2.00 | 20.0 | excellent | 10 |
| 27 Jul | 5 | 18,286 | 0 | 0 | 0 | 11 | 136 | 5 | 0 | 0 | 0 | 1,439 | 0 | 2.14 | 19.0 | excellent | 12 |
| 28 Jul | 4 | 18,290 | 0 | 0 | 0 | 1 | 137 | 0 | 0 | 0 | 0 | 593 | 1 | 2.07 | 19.0 | excellent | 18 |
| 29 Jul | 4 | 18,294 | 0 | 0 | 0 | 3 | 140 | 2 | 0 | 0 | 0 | 260 | 0 | 2.00 | 20.0 | excellent | 2 |
| 30 Jul | 2 | 18,296 | 0 | 2 | 3 | 0 | 140 | 0 | 0 | 0 | 0 | 167 | 0 | 1.95 | 20.0 | excellent | 3 |
| 31 Jul | 2 | 18,298 | 0 | 5 | 5 | 0 | 140 | 0 | 1 | 0 | 0 | 211 | 0 | 1.90 | 20.0 | excellent | 6 |
| 1 Aug | 4 | 18,302 | 0 | 5 | 5 | 2 | 142 | 0 | 0 | 0 | 0 | 676 | 0 | 1.86 | 19.5 | excellent | 8 |
| 2 Aug | 12 | 18,314 | 0 | 16 | 9 | 11 | 153 | 0 | 0 | 0 | 1 | 2,017 | 0 | 1.84 | 18.8 | excellent | 7 |
| 3 Aug | 8 | 18,322 | 0 | 6 | 5 | 10 | 163 | 0 | 0 | 2 | 0 | 4,676 | 0 | 1.81 | 18.2 | excellent | 8 |
| 4 Aug | 6 | 18,328 | 0 | 5 | 13 | 58 | 221 | 8 | 0 | 1 | 0 | 2,792 | 1 | 1.82 | 17.2 | excellent | 10 |
| 5 Aug | 7 | 18,335 | 0 | 7 | 17 | 167 | 388 | 20 | 0 | 4 | 0 | 1,603 | 0 | 1.84 | 17.0 | excellent | 4 |
| 6 Aug | 3 | 18,338 | 0 | 0 | 8 | 131 | 519 | 20 | 2 | 4 | 0 | 749 | 0 | 1.85 | 16.9 | excellent | 5 |
| 7 Aug | 5 | 18,343 | 0 | 0 | 0 | 296 | 815 | 0 | 0 | 2 | 1 | 1,384 | 0 | 1.96 | 16.8 | excellent | 3 |

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| Date | Chinook salmon | | | | | Coho salmon | | | | | River water | | | Boat traffic thru weir | | | |
|--------------|----------------|--------|------------|------------|------------------|---------------|--------|------------|------------------|---------------|-------------|---------------|-----------|------------------------|------------|------------|--------------|
| | Passage | | Sampled | | Hrvst above weir | Passage | | Sampled | Hrvst above weir | Daily passage | | | | | Stage (ft) | Temp. (°C) | Clarity (cm) |
| | Daily | Cum | n | Fem | | Daily | Cum | | | Red | Chum | Pink | Pike | | | | |
| 8 Aug | 0 | 18,343 | 0 | 0 | 1 | 269 | 1,084 | 0 | 0 | 0 | 0 | 320 | 0 | 1.90 | 16.2 | excellent | 2 |
| 9 Aug | 1 | 18,344 | 0 | 0 | 3 | 616 | 1,700 | 0 | 0 | 0 | 2 | 446 | 1 | 1.92 | 15.5 | excellent | 7 |
| 10 Aug | 0 | 18,344 | 0 | 2 | 0 | 178 | 1,878 | 10 | 1 | 1 | 0 | 155 | 0 | 2.00 | 14.5 | excellent | 5 |
| 11 Aug | 0 | 18,344 | 0 | 0 | 3 | 539 | 2,417 | 10 | 1 | 1 | 3 | 393 | 0 | 2.10 | 14.5 | fair | 10 |
| 12 Aug | 49 | 18,393 | 0 | 0 | 4 | 8,119 | 10,536 | 20 | 0 | 3 | 5 | 1,173 | 0 | 2.38 | 14.0 | fair | 0 |
| 13 Aug | 14 | 18,407 | 0 | 0 | 0 | 1,519 | 12,055 | 20 | 1 | 0 | 0 | 198 | 0 | 2.50 | 14.8 | fair | 8 |
| 14 Aug | 8 | 18,415 | 0 | 1 | 0 | 1,132 | 13,187 | 9 | 0 | 0 | 0 | 154 | 0 | 2.40 | 15.8 | good | 6 |
| 15 Aug | 10 | 18,425 | 0 | 0 | 0 | 664 | 13,851 | 9 | 0 | 0 | 0 | 109 | 0 | 2.30 | 16.0 | excellent | 1 |
| 16 Aug | 4 | 18,429 | 0 | 0 | 0 | 484 | 14,335 | 10 | 4 | 2 | 0 | 89 | 0 | 2.17 | 15.0 | excellent | 6 |
| 17 Aug | 6 | 18,435 | 0 | 0 | 0 | 1,052 | 15,387 | 20 | 7 | 0 | 1 | 111 | 0 | 2.13 | 14.9 | excellent | 7 |
| 18 Aug | 16 | 18,451 | 0 | 0 | 0 | 843 | 16,230 | 8 | 6 | 2 | 3 | 79 | 0 | 2.09 | 15.8 | excellent | 7 |
| 19 Aug | 7 | 18,458 | 0 | 0 | 0 | 243 | 16,473 | 0 | 0 | 0 | 1 | 31 | 0 | 2.07 | 15.0 | excellent | 2 |
| 20 Aug | 3 | 18,461 | 0 | 0 | 0 | 490 | 16,963 | 20 | 0 | 0 | 0 | 21 | 0 | 2.10 | 13.6 | excellent | 9 |
| 21 Aug | 4 | 18,465 | 0 | 0 | 0 | 747 | 17,710 | 5 | 0 | 1 | 3 | 23 | 0 | 2.27 | 12.7 | excellent | 1 |
| 22 Aug | 8 | 18,473 | 0 | 0 | 0 | 3,745 | 21,455 | 20 | 0 | 5 | 9 | 83 | 0 | 2.66 | 12.6 | excellent | 5 |
| 23 Aug | 11 | 18,484 | 0 | 0 | 0 | 430 | 21,885 | 0 | 0 | 0 | 0 | 11 | 0 | 3.70 | 12.0 | poor | 11 |
| 24 Aug | 9 | 18,493 | 0 | 0 | 0 | 31 | 21,916 | 0 | 0 | 0 | 0 | 3 | 0 | 4.42 | 12.3 | poor | 11 |
| 25 Aug | 10 | 18,503 | 0 | 0 | 0 | 25 | 21,941 | 14 | 0 | 1 | 0 | 4 | 0 | 4.12 | 12.0 | poor | 27 |
| 26 Aug | 9 | 18,512 | 0 | 0 | 0 | 48 | 21,989 | 16 | 0 | 0 | 4 | 10 | 0 | 3.45 | 11.8 | fair | 5 |
| 27 Aug | 5 | 18,517 | 0 | 0 | 0 | 19 | 22,008 | 0 | 0 | 0 | 0 | 5 | 0 | 3.01 | 11.8 | fair | 2 |
| 28 Aug | 5 | 18,522 | 0 | 0 | 0 | 30 | 22,038 | 0 | 2 | 0 | 5 | 7 | 0 | 2.79 | 13.0 | fair | 5 |
| 29 Aug | 1 | 18,523 | 0 | 0 | 0 | 25 | 22,063 | 0 | 0 | 0 | 3 | 4 | 0 | 2.73 | 12.8 | fair | 5 |
| 30 Aug | 3 | 18,526 | 0 | 0 | 0 | 16 | 22,079 | 0 | 0 | 0 | 0 | 1 | 0 | 2.70 | 12.2 | fair | 4 |
| 31 Aug | 3 | 18,529 | 0 | 0 | 0 | 10 | 22,089 | 0 | 0 | 0 | 1 | 0 | 0 | 2.72 | 12.6 | fair | 7 |
| 1 Sep | 0 | 18,529 | 0 | 0 | 0 | 9 | 22,098 | 0 | 0 | 0 | 0 | 0 | 3 | 2.68 | 12.0 | fair | 9 |
| 2 Sep | 2 | 18,531 | 0 | 0 | 0 | 42 | 22,140 | 0 | 0 | 0 | 2 | 0 | 0 | 2.85 | 11.4 | fair | 8 |
| 3 Sep | 0 | 18,531 | 0 | 0 | 0 | 1 | 22,141 | 0 | 0 | 0 | 0 | 0 | 0 | 4.29 | 11.0 | poor | 3 |
| Total | 18,531 | | 281 | 128 | 83 | 22,141 | | 267 | 27 | 37 | 54 | 27,929 | 13 | | | | 714 |

Note: Cum = cumulative; n = sample size (number of fish); Fem = number of female fish in the sample; Red = sockeye salmon; Chum = chum salmon; Pink = pink salmon; Pike =northern pike.

**APPENDIX J: MATANUSKA-SUSITNA BOROUGH LAKE
MANAGEMENT PLANS**

Appendix J1.—Matanuska–Susitna Borough lake management plans.

| Lake | | Regulations | |
|-------------------|---|---|--------------|
| Name | Characteristics | Details | Date adopted |
| Big Lake | Surface Area: 2,495 acres Maximum Depth: 89 feet Mean Depth: 30 feet | Personal Watercraft Prohibited on Meadow Creek Quiet Hours: 11:00 PM–8:00 AM Sun–Sat Ice House Registration No Wake Zone: 150 feet from shoreline | Aug-98 |
| Blodgett Lake | Surface Area: 57.6 acres Maximum Depth: 29 feet Mean Depth: 10.7 feet | Horsepower Limit: 10 Personal Watercraft Prohibited Quiet Hours: 10:00 PM–8:00 AM Sun–Thurs. 11:00 PM–8:00 AM Fri–Sat | Sep-97 |
| Bonnie Lake Area | Surface Area: 105 acres | Electric Motors Only | Nov-96 |
| Upper Bonnie Lake | Maximum Depth: 35 feet Mean Depth: Not Available | Personal Watercraft Prohibited | |
| Bonnie Lake | Surface Area: 99.8 acres Maximum Depth: 35 feet Mean Depth: Not Available | Personal Watercraft Prohibited | |
| Ravine Lake | Surface Area: 12 acres Maximum Depth: 25 feet Mean Depth: 12 feet | Horsepower Limit: 10 HP Personal Watercraft Prohibited | |
| Carpenter Lake | Surface Area: 176 Acres Maximum Depth: 30 feet Mean Depth: 8.1 feet | Personal Watercraft prohibited 10 HP Limit - Time Share Quiet hours: 10:00 PM–8:00 AM Sun–Sat No wake zone 100 feet from shore, Winter Motor Vehicle Ban | Jun-06 |

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| Lake | | Regulations | |
|-------------------|--|--|--------------|
| Name | Characteristics | Details | Date adopted |
| Christiansen Lake | Surface Area: 179 acres Maximum Depth: 82 feet Mean Depth: 22 feet | Personal Watercraft prohibited 15 HP limit Quiet Hours: 10:00 PM–8:00 AM, Sun–Sat Special permit: To accommodate building construction, early season testing of river boats & other special uses. HP limit maybe waived by Special permit. | Sep-99 |
| Cottonwood Lake | Surface Area: 262 acres Maximum Depth: 39 feet Mean Depth: 11 feet | Mufflers, cowlings, exhaust systems Quiet Hours: 11:00 PM–8:00 AM Sun–Sat No Wake Zone: 100 feet from shoreline Special Events Permits | 1995 |
| Crooked Lake | Surface Area: 250 acres Maximum Depth: 35 feet Mean Depth: 14 feet | No Wake Zone: 50 feet from shoreline at the public dock | Aug-95 |
| Crystal Lake | Surface Area: 132 acres Maximum Depth: 24 feet Mean Depth: 11.7 feet | Quiet Hours: 10:00 PM–8:00 AM Sun–Sat | Aug-96 |
| Diamond Lake | Surface Area: 139 acres Maximum Depth: 23 feet Mean Depth: 7.6 feet | Horsepower Limit: 10 Quiet Hours: 10:00 PM – 8:00 AM Sun–Sat Ice House Registration No Wake Zone: 100 feet from ordinary high water mark | Apr-99 |
| Florence Lake | Surface Area: 55 acres Maximum Depth: 41 feet Mean Depth: 17.6 feet | Quiet Hours: 10:00 PM and 8:00 AM Sun–Sat No Wake Zone: 100 feet from shoreline. Personal watercraft ban | Apr-06 |

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| Lake | | Regulations | |
|--|---|--|--------------|
| Name | Characteristics | Details | Date adopted |
| Finger Lake | Surface Area: 362 acres Maximum Depth: 44 feet Mean Depth: 15.5 feet | Mufflers, cowlings, exhaust systems Quiet Hours: 11:00 PM–8:00 AM Sun–Sat No Wake Zone: 100 feet from shoreline Special Events Permits | 1995 |
| Fish Lake | Surface Area: 59 acres Maximum Depth: Not Available Mean Depth: Not Available | Horsepower Limit: 5 | Aug-97 |
| Honeybee Lake | Surface Area: 58 acres Maximum Depth: 35 feet Mean Depth: 13.5 feet | Electric Motors Only Quiet Hours: 7:00 PM–9:00 AM Sun–Sat | Nov-97 |
| Island & Doubloon Lakes Island Lake | Surface Area: 85 acres Maximum Depth: Not Available Mean Depth: Not Available | Personal Watercraft Prohibited | Aug-96 |
| Doubloon Lake | Surface Area: 14 acres Maximum Depth: Not Available Mean Depth: Not Available | Personal Watercraft Prohibited | |
| Jean Lake | Surface Area: 51 acres Maximum Depth: 30 feet Mean Depth: 3–5 feet | Personal Watercraft Prohibited Electric Motors Only Quiet Hours: 10:00 PM–8:00 AM Sun–Sat Commercial floatplane operations are discouraged. | Jan-06 |
| John Lake | Surface Area: 52 acres Maximum Depth: Not Available Mean Depth: Not Available | Horsepower Limit: 10 Quiet Hours: 10:00 PM–8:00 AM Sun–Sat (electric and trolling motors allowed during quiet hours) | Aug-96 |
| Knik Lake | Surface Area: 50 acres Maximum Depth: 37 feet Mean Depth: 19 feet | Horsepower Limit: 5 Quiet Hours: 10:00 PM–8:00 AM Sun–Thurs 11:00 PM–8:00 AM Fri–Sat | Aug-95 |

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| Name | Lake Characteristics | Regulations Details | Date adopted |
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| Liten Lake | Surface Area: 57 acres Maximum Depth: 10+ feet Mean Depth: 4-6 feet | Motorized Watercraft Prohibited Personal Watercraft Prohibited No Wake Zone: Lake Wide Quiet Hours: 10:00 PM–8:00 AM Sun–Sat Public access to lake is discouraged. Commercial floatplane operations are discouraged. | Jan-06 |
| Little Lonely Lake | Surface Area: 56 acres Maximum Depth: 63 feet Mean Depth: 20 feet | Personal Watercraft Prohibited Horsepower Limit: 10 No Wake Zone: Lake Wide Quiet Hours: 10:00 PM–8:00 AM Sun–Sat Ice House Registration Commercial floatplane operations are discouraged. | May-05 |
| Long Lake (Houston) | Surface Area: 44 acres Maximum Depth: 17 feet Mean Depth: 8.8 feet | Personal Watercraft Prohibited Horsepower Limit: 10 No Wake Zone: 100 feet from ordinary high water mark Quiet Hours: 10:00 PM–8:00 AM Sun–Sat | Nov-01 |
| Marilee Lake | Surface Area: 33.8 acres Maximum Depth: 18 feet Mean Depth: 7.3 feet | Horsepower Limit: 5 | Sep-98 |
| Marion Lake | Surface Area: 113 acres Maximum Depth: 42 feet Mean Depth: 20.6 feet | Personal Watercraft Prohibited Quiet Hours: 10:00 PM–8:00 AM Sun–Sat No Wake Zone: 100 feet from ordinary high water mark. Time Share: A lake-wide no wake speed except on Thursdays, Fridays, Saturdays, and all 3-day weekends mandated by federal holiday (Memorial Day, Fourth of July, and Labor Day). | Nov-00 |

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| Lake | | Regulations | |
|---------------------|--|---|--------------|
| Name | Characteristics | Details | Date adopted |
| Memory Lake | Surface Area: 84 acres Maximum Depth: 20 feet Mean Depth: 7.2 feet | Horsepower Limit: 10 Quiet Hours: 10:00 PM–8:00 AM Sun–Sat Access to be day use only | Sep-98 |
| Morvoe Lake | Surface Area: 87 acres Mean Depth: 11 feet Maximum Depth: 17 feet | 25 Horsepower limit Quiet Hours: 11:00 PM–8:00 AM Sun–Sat | Jun-05 |
| Neklasen Lake | Surface Area: 72 acres Maximum Depth: 67 feet Mean Depth: 16 feet | Personal Watercraft Prohibited Quiet Hours: 10:00 PM–8:00 AM Sun–Sat No Wake Zone: 100 feet from shoreline except when a waterskier is leaving dock or shoreline. Timeshare: Lake-wide No Wake Zone except Thursdays, Fridays, first and third Saturdays of the month, national holidays, and three-day weekends resulting from national holidays. | Jan-00 |
| Lower Neklasen Lake | Surface Area: 36 acres Maximum Depth: unknown Mean Depth: less than 5 feet | All Motorized Water Craft Prohibited | Jan-00 |
| Paradise Lake | Surface Area: 25 acres Maximum Depth: 20 feet Mean Depth: 5-10 feet | Electric motors only Quiet Hours: 9:00 PM–9:00 AM Sun–Sat Personal watercraft prohibited | Apr-07 |
| Question Lake | Surface Area: 80 acres Maximum Depth: unknown Mean Depth: unknown | Horse Power Limit: 5 Quiet Hours: 10:00 PM–8:00 AM Sun–Sat Motor Vehicles prohibited during winter months when lake is frozen. | Sep-98 |

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| Name | Lake Characteristics | Regulations Details | Date adopted |
|-----------------------------|---|--|--------------|
| Little Question Lake | Surface Area: 25 acres Maximum Depth: unknown Mean Depth: unknown | Non-motorized Quiet Hours: 10:00 PM–8:00 AM Sun–Sat Motor Vehicles prohibited during winter months when lake is frozen. | Sep-98 |
| Lake Five and Unnamed Lakes | Surface Area: unknown Maximum Depth: unknown Mean Depth: unknown | Non-motorized Quiet Hours: 10:00 PM–8:00 AM Sun–Sat All these lakes allow for a special permit to exceed motor limits for building construction Motor Vehicles prohibited during winter months when lake is frozen Ice House Registration | Sep-98 |
| Rainbow Lake | Surface Area: 72.3 acres Maximum Depth: Not Available Mean Depth: Not Available | Horsepower Limit: 10 Quiet Hours: 10:00 PM–8:00 AM Sun–Sat | Nov-95 |
| Shirley Lake | Surface Area: 121 acres Maximum Depth: 23 feet Mean Depth: 14.1 feet | Personal Watercraft prohibited. Quiet Hours: 10:00 PM–8:00 AM Sun–Sat No Wake Zone: 100 feet from ordinary high water mark | Apr-06 |
| Stephans Lake | Surface Area: 95 acres Maximum Depth: 30 feet | Horsepower limit: 10 on timeshare basis. Personal watercraft ban, Quiet Hours: 10:00 PM–8:00 AM Sun–Sat No Wake Zone: 100 feet from shoreline | Mar-07 |
| Oriana Lake | Surface Area: 9.37 acres Maximum Depth: 25 feet | No motorized watercraft. | Mar-07 |
| Threemile Lake | Surface Area: 119 acres Maximum Depth: 15 feet Mean Depth: 3.3 feet | Personal Watercraft prohibited. Amphibious Vehicles prohibited. Horsepower Limit: 10 Quiet Hours: 10:00 PM–8:00 AM Sun–Sat | Nov-02 |

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| Name | Lake Characteristics | Regulations Details | Date adopted |
|-------------------|--|---|--------------|
| Toad Lake | Surface Area: 50 acres Maximum Depth: unknown Mean Depth: 10 feet | Electric motors only | Sep-98 |
| Twin Island Lake | Surface Area: 151 acres Maximum Depth: 61 feet Mean Depth: 14.8 feet | Horsepower Limit: 10 Quiet Hours: 10:00 PM–8:00 AM Sun–Thu 11:00 PM–8:00 AM Fri–Sat Walk-in only access | Jul-97 |
| Walby Lake | Surface Area: 54 acres Maximum Depth: 18 feet Mean Depth: 5.4 feet | Horsepower Limit: 10 Quiet Hours: 10:00 PM–8:00 AM Sun–Sat Motor Vehicles prohibited during winter months when lake is frozen. | Sep-98 |
| Wasilla Lake | Surface Area: 374 Maximum Depth: 48 feet Mean Depth: 17 feet | Mufflers, cowlings, exhaust systems Quiet Hours: 11:00 PM–8:00 AM Sun–Sat No Wake Zone: 100 feet from shoreline Special Events Permits | 1995 |
| West Papoose Lake | Surface Area: 212 acres Maximum Depth: Not Available Mean Depth: Not Available | Personal Watercraft Prohibited Quiet Hours: 11:00 PM–8:00 AM Sun–Sat No Wake Zone: 100 feet from ordinary high water mark | Aug-96 |
| Whiskey Lake | Surface Area: 270 acres Maximum Depth: 35 feet Mean Depth: Unavailable | Personal Watercraft Prohibited No Wake Zone: 150 feet from ordinary high water mark Quiet Hours: 10:00 PM–8:00 AM Sun–Sat Motorized Watercraft Prohibited on portions of the inlet creek and outlet (Whiskey) creek. | Aug-04 |
| Wolf Lake | Surface Area: 62 acres Maximum Depth: 17 feet Mean Depth: 6.8 feet | Horsepower Limit: 6 Motor Vehicles prohibited during winter months when lake is frozen. | Jul-97 |
| Wolverine Lake | Surface Area: 55 acres Maximum Depth: 7 feet Mean Depth: 2.2 feet | Personal Watercraft Prohibited Quiet Hours: 10:00 PM–8:00 AM Sun–Sat Electric motors only Commercial Floatplane Operations Prohibited. | Aug-04 |